THE

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Home, Institution, School

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THE
Journal of Home Economics

VOL. VI DECEMBER, 1914 NO. 5

FUNDAMENTAL CONCEPTIONS OF HOME ECONOMICS[1]

SARAH LOUISE ARNOLD

Doctor Grenfel, in lecturing to the students of Harvard University, chose as his subject "What life means to me." It is probable that his lectures, interpreting his conception of life, gave to the students the best that he could possibly have given; for the utmost that we can do for another is to interpret life as we have seen it. This may be done through pictures, through sculpture, through buildings, through machinery, through words; but the chief contribution of any individual is to render back in some fashion, for the service of others, the picture of life as it seems to him.

I therefore shall not apologize for using the pronoun "I," or for giving as my last message to you a statement of the essentials of Home Economics as they appear to me. I shall be more than glad if by this means I can contribute something toward perspective, and perhaps withdraw our attention from the immediate detail to center it upon the goal which we are seeking together.

Our conception of Home Economics must be both partial and progressive. It means various things to the various individuals gathered here tonight. It will probably mean something finer and better to each and every one of us in the years to come.

One cannot work very long with hundreds of girls without coming to realize that it takes girls, and all of us, a long while to grow up. John Fiske, in the Destiny of Man, shows us what gifts have come to the human race through the prolongation of infancy; but even

[1] President's Address, presented at the Seventh Annual Meeting of the American Home Economics Association, Cleveland, 1914.

John Fiske assumed that infancy had been outgrown when the child emerged from the care of the home. It is true, however, that we are never fully grown up. We have the infant's approach to any subject, the child's experience of it, and later the mature understanding. It is probable that our ideas of Home Economics belong to these three stages of experience. Let us follow our notions back to the beginning and see what the home has meant to us.

I think I was like most people in first looking at the home as the place where I belonged and where it was natural that I should be taken care of. This home was as fundamental as the forest or the rocks that bordered the sea. It never occurred to me that the home had not always been there. It was perfectly reasonable that it should shelter me and my family. I was unconscious of the fact that those early days of my childhood were shaping my various conceptions of life and giving me, through the daily teaching of the home, not only language but the fundamental and indispensable ideas which underlie the ordinary vocabulary. The facts and relations came as naturally to my understanding as did the home itself. But childhood receives this great gift with complete unconsciousness. It is only in the last years of life that we look back with understanding upon this wonderful experience. Yet the corner-stone of education is laid in the home and perhaps the essential contribution of the home is that it is first and foremost a school as well as a shelter.

Those of us who teach know how widely different are the capacities and the understanding of the various children who come to us to be taught. We say of one, "She has been well brought up," of another that her home is meager and poor. The understanding which the one brings is the product of the home environment and is perhaps the most important income from the investment which has been made in the home.

Over across the street from the old New England home where I lived was a knoll beyond the hollow. The house looked toward the sunset, which I saw always behind the pines and oaks upon the knoll. This last I called a hill. Beneath the trees were my playgrounds, and with my cousins I used to make playhouses. I never thought of the meaning of the word; playhouse was a thing by itself, not a house which I made in play. It was built of shingles with bricks; that was fundamental construction. It was modeled upon the Parthenon, though unconsciously. I remember that the bricks had to

be selected with great care, for it was a matter of the utmost necessity that the shingles should lie flat.

This house contained my real treasures, the things which I thought were essential to life—broken glass, cracked dishes and the nose of an abandoned teapot. I have never had any treasures since that were much more valuable to me than these were at that time.

I remember another playhouse, a somewhat dilapidated top of an old-fashioned covered wagon of the sort that appeared only in the East. In order to get into the back seat, one had to climb over the front seat. This wagon had for some reason lost its wheels and was set down by the barn. It was a most delightful house—the second stage beyond bricks and shingles, partly prepared for me by man and not despised therefor.

Now all of this is meant to recall to you that you and I made what we call playhouses. Have you ever seen the bird making her nest in the spring? Have you seen her fasten together the mud and the twine, the grass and the sticks, and then shape together with her breast the material which she has brought? The instinct of making her nest is her inheritance. I believe that there is born into every human being the same instinct that shows itself in the robin as she carries her mud and sticks to the place which she has chosen in the crotch of the apple tree. You and I showed it as we set up our bricks and shingles to make our playhouses. This is a primitive, dominant instinct, and I believe that it will never depart from the human race. One of the functions of Home Economics is to make clear that this instinct expresses the law of God, who himself has put into our hearts to make homes, to shape them and maintain them.

One purpose of ours, then, should be to take hold of hands with all the agencies which are at work doing this fundamental thing. Those who are busy in social service are working for the same purpose, to create and maintain the home and to make it as good as a home can be. I am comforted when I count the many who have the same vision and express the same desire. I hope that as the years go on we shall understand clearly this effort in others, shall recognize the common purpose and shall take hold of hands with all those who are helping to bring better homes to all the human race.

I have a compassionate feeling for the little girl who used to make her house of shingles and bricks, satisfied with broken china, with moss and acorn-cups. But should I not be just as compassionate

and tender in my thoughts of those who are building their playhouses all around us? What was the use of a playhouse? Merely to educate the child. Most of us would think that it did not matter if the meandering cow kicked it over.

Just a little while ago there was a shiver in one of our great cities. We saw the headlines in the paper that San Francisco had fallen to the ground and that its houses were in ashes. I had recently visited San Francisco and had admired the energy, enthusiasm and spirit that made the city what it was. The whole country was desolate as we thought of the homes that had been lost. Today, when you visit San Francisco, you find a fair and wonderful city. Other homes have taken the place of the playhouses that were there before. What had they been there for? What had they done? Ah! The enduring thing that belonged to the little playhouse of mine was the part of it that went into me—the thing that I became through the play, which was just as much a part of me as the work which I enjoyed no less. And the thing which endures in these other houses of ours is, after all, that which passes into us. If this is true, it was not San Francisco that went up in smoke and was gathered up in ashes. Go there today and you will find abiding the thing that was there before, only finer and stronger than ever. The real thing, then, that happens in our homemaking is that the home becomes a part of us, and the thing to be counted essential in the home is the thing that the boy or girl carries away.

In that old gray house fronting the west was an old-fashioned secretary whose drawers were full of letters. Many of them had come from the battlefield and were written by "the boys" who had gone to the front. I read the letters over and over and knew, even as a child, what it might mean to show heroism on the battlefield. But I also read on page after page the assurance that the strength that was shown in battle was built upon the teaching of the home. What the mother had said and done, what the father had been, came out in the boy on the battlefield. I suspect that the spirit which rebuilt San Francisco had been nurtured in those earlier homes. It was that spirit that had made the home worth while and insured the rebuilding of the city.

As we grow older, then, we come to understand that the home which in childhood we had thought existed for our convenience, was not for itself alone. It is possible that even in our maturer years we

have thought of each home as a separate unit existing for itself or for a particular family. It is that, but it is also something greater. It is a growing-place, by means of which we become prepared to share in the great business of life, carrying our load and contributing our strength. We must not forget, then, that these growing-places will differ. The thing which is suited to one group will be inadequate for another. We must remember this when we are discussing values and when we are measuring efficiency. It will help us to exercise the compassion and tenderness of which I have spoken before. It will help us to be reasonable in our requirements. The thing in our neighbor's home which seems to us useless may be a link in the chain which is lifting her to a clearer understanding.

I once read in Good Housekeeping in the column called "Discoveries," a letter from a woman who described the use which she had made of a broken flat-iron. It had lost its handle. She converted it into a pin-cushion around which she tied a blue ribbon, thus adding to both convenience and beauty. I remember making some laughing comment upon the discovery; but I have no doubt that the flat-iron pin-cushion had the same use as did the teapot nose and the other bits of cracked china in my playhouse. We are all children of a larger growth, and the flat-iron, padded and beribboned and turned to a use for which neither nature nor grace had designed it, was probably performing the same function for its owner as did my acorn-cups and bricks and shingles for me. It indicated one of the stages on the way; it was one of the implements in her playhouse; and by-and-by there may come from her succession of experiences the same ideals that have emerged from yours and mine. If this is true, it behooves us who are interested in Home Economics to be very generous and tolerant and patient in our dealing with people in their various homes. I think I should have resented it very much if my big brother had said to me that my acorn-cups were good for nothing; it was not true—they were good for something, and he would have had no more right to interfere with my treasures of that day than with my bank account today. It is just possible that one is as important as the other. If we go with a ruthless hand and a critical eye into the homes of our neighbors, we shall find many things to displace. We would substitute a great many things of our own, for we are likely to forget that these friends are passing through stages of development which differ from ours at the present time, yet which are just as essential to them

as our various steps have been to us. We should be very careful in dealing with these treasures that belong to others, very gentle in speaking of them, very cautious not to underrate them. We may be perfectly sure that they will be abandoned as soon as these friends have found something better. We should deal with them as we do with the baby, when instead of snatching away the treasure which he has seized, we substitute something else which we try to make attractive. Let us act in the same way with our neighbors. We cannot make humanity leap from one stage to another.

> We build the ladder by which we rise
> From the lowly earth to the vaulted skies,
> And we mount to its summit round by round.

All the way along, we spend our money for the things which seem to us worth while. I have often said to college girls that I would like to have a panorama which would report faithfully to me in succession the things which they have loved from their childhood up. How the values would change! I know a small boy, a minister's son, who was devoted through his childhood days to the idea of becoming a clown. His older sister frankly told him that he was likely to fulfill his ambition, but nobody else laughed very much at it, and he lived through the period when to be a clown was his highest ambition. He has changed his sense of values. I wonder if we are not all paying high for the treasure which we substitute for the great essentials.

A father said to me the other day, "I have just been talking with my boy and telling him that every dollar stands for the work of some man and before he spends it, he must stop to think what he is spending it for." I shall not discuss this evening how women spend the money that men have earned. We have heard much on that topic and there is room yet for greater wisdom than we now display in such spending. But we hear much less of another theme which I wish we might discuss in our Home Economics. The thing which we all are spending most prodigally is that precious, precious thing which will never be returned to us, called time. To the old gray house facing westward, used to come, when I was a little girl, two dear old great-aunts named Betsy and Dolly. They came in a covered wagon from a street just a few miles away called Back Street. They were safely convoyed to our home by an old and steadfast sorrel horse. By his help they crossed the railroad track and followed the wide,

sandy road until they reached us. Having been welcomed and brought in to their rocking chairs by the window they began to "spend the day." After a half hour or so, the train would rumble past the field behind the house and Betsy would say to Dolly, "We have just escaped the cars."

The thing they came for was the thing that nobody talks about now. Who is there in this audience who ever "spends the day" with a friend? I wonder what it would mean for you and me to spend a day as wisely as we try to spend that dollar bill? What is all this labor that is conserved in dollar bills? What shall we give to this poor mother who is struggling to support her children, another dollar if she will work all day or an hour to spend in quiet and peace? I sometimes wish that we might stop talking for a while about the thing called efficiency and try to learn how we are spending the stuff that life is made of.

Not long ago some fellow-passengers on a train told me of a recent visit to a great factory where the administration presented the triumph of efficiency. "It was a fearful place," said the gentleman. "I saw men standing in ranks and doing one thing over and over all day long at the topmost speed. If anyone halted for a moment, he stopped the whole line. He must keep up his speed so that his neighbor would not lose a minute." The gentleman's wife added, "Think of spending a day like that and all the days! What have you left at night? What will you be at the end of a year? What can you do besides the one thing with which you have filled your days?" I wish that we might give more thought to the wise spending of time. I wish we might revive that conception of the home which in the olden time permitted the spending of a day with a friend. We spend our money prodigally in that which we call entertainment. Let us be more thrifty and spend our hours with our friends in the home which has learned how to provide for them the richest treasures of our experience.

When once we have realized what the home is for and what its richest gifts may be, we shall make different decisions as to comfort and convenience. A young friend of mine married but did not set up housekeeping. She and her husband "boarded." Perhaps you do not know what that means. I once asked a small boy in school where he lived, and he replied, "I don't live; I board." These people "boarded" because they wanted to "save." The wife became a saleswoman and liked it so well that she would not go to housekeeping.

"I like to spend what I earn." "What do you buy," I asked. "Oh, clothes, suits, hats, ribbons and gloves." "Let us keep house," said the husband. "Oh no," she replied, "We can have so much more if I earn, too." So the days were spent for hats and clothes and the great and beautiful thing which these two might have had in their lives, never came. Should we not try to find out, first of all, why the home is worth while and what things are worth while to do in the home, instead of multiplying recipes and adding mere conveniences? Shall we not come to understand what it means to "spend" our days in the home so that the lives of all who share its shelter shall become great and beautiful? What a rare income that would bring us! How we should discover the worthlessness of many of the things for which we strive and the marvel of many which we now let go! A little niece of mine walking by my side at the seashore and handing me one white stone after another, said all at once, "It is so queer, so many beautiful things you pass right by." The childish words were a stab. She was seeing there on the seashore the beautiful things that I had passed by, and I had lost the vision and understanding of childhood. In Jeannette Lee's delightful book, "Uncle William" tells us that "most of us don't pay attention enough to just a-livin'." Is there no path by which we can return to such understanding? Can we not find in our homes the great joy of a simple and wholesome life in which the essential things come first?

If we are justified in thinking of the home at first as our very own, the place of shelter where we belong, the place that was made for us and where we are first, we must also remember that this is not the only light in which the home must be considered. Someone has said, "Charity does begin at home, but it should not end there." While the home is for ourselves, it is also for others. A friend of mine has often said to me that old-fashioned hospitality is dying out. When she was a girl living in the big city, she often found her mug and tooth brush on the attic stairs, which meant that she must give up her room for the night to some friend who had come. I recently met another friend, an attractive old lady, who said that she had "put up" her friends at the club—"So convenient, you have no bother of entertaining." It was a far cry from the day of the mug and the tooth brush on the attic stairs, with the friends on the inside of the house and under the roof, to this day of prosperity, when one can care for her friends by paying the bill at a club.

Some of us remember the time when every neighbor called upon the home for strength or comfort or help. When a neighbor was sick, someone in the family went to nurse or sit up at night. The "watcher," when death had visited the house, was the next-door neighbor. Now, one goes to a big hospital and the rest of the world goes on just the same; but we have bartered our birthright for a mess of pottage. The home is not for ourselves alone. It is for all who need it. Elizabeth Whittier pictures the Bedouin sitting at the door of his tent and calling to all who are in need, to come in. She urges upon us the same open hospitality.

> Whoever thou art whose need is great,
> In the name of Christ, the compassionate
> And merciful One, for thee we wait.

Jane Addams tells us of the crowded tenement house into which was welcomed a young woman whose husband had deserted her. She led one baby by the hand. Another baby was yet to come. The father of this tenement family went out and slept in the park for two weeks, night after night, that there might be room left in the crowded rooms for this deserted woman and her child. Think of the beauty of that hospitality and friendliness. Are the virtues of hospitality restricted to the very poor?

I have suggested the essential elements of Home Economics as I see the work. I hope we shall not change for the thing called efficiency the real treasures of our home life. I hope that we shall not barter our birthright for the mess of pottage. I trust that we shall not exchange hospitality for convenience and comfort. I trust that we shall have such vision as will reveal to us what homes are for and that we shall come to understand that no peace can come to any home of ours unless we help to bring peace and fullness and worth and comfort and understanding to all homes in this beloved land of ours.

CURRENT PROBLEMS IN HOME ECONOMICS[1]

DAVID SNEDDEN

Commissioner of Education in Massachusetts

Dr. Snedden in his address filled the rôle of prophet and of critic and thus lays us under a double debt. We often ask of the social economist that he foretell for us the material surroundings and altered function of the home fifty or even twenty-five years hence, so that our curriculum and social plans may be adjusted to the inevitable changes, but we ask in vain. We are, therefore, the more glad to give space to Dr. Snedden's views of future social conditions.

Equally suggestive, whether we agree with him or not, are his criticisms of the current methods of instruction. The JOURNAL would be very glad to receive from its readers discussion of these views.—*Editor.*

We may well assume that if present tendencies continue, there will be within the boundaries of the United States upwards of one hundred and fifty million people in 1964. Probably there will be among these relatively fewer very rich people, and also fewer very poor people than at present. Families of middle class or rank, in the economic sense, will have slightly larger families, and people less well off will have smaller families than at present. The great majority of married women will give their entire working time to home-making, with employed assistance as at present only at critical periods. Nearly all young women will enter upon wage-earning careers of from five to ten years in length prior to marriage, and after having received a suitable general education. The state will insist that every girl or young woman shall at some time learn, in a definite and effective fashion, the more essential arts of sound home-making.

By that time we shall have learned much more than we now know regarding the most effective methods of education in Home Economics, as well as in other fields. Parents and, when feasible, girls themselves will be carefully and authoritively advised at successive stages as to the most desirable educational and vocational careers which daughters should follow in the light of their abilities, their economic conditions, and their persistent interests. Young women will be given definite preparation for wage-earning callings—many of which callings will probably be in homes, as we cease relying upon immigrants for domestic service. But the requirements of preparation for wage-earning vocations will not be allowed seriously to interfere with the far more

[1] Presented at the Seventh Annual Meeting of the American Home Economics Association, Cleveland, 1914. Dr. Snedden's address is given in part.

important social demand for systematic training for home-making. It will be accepted as fundamental that in a sound and enduring society a large majority, approximating one hundred per cent, of all women must be expected eventually to become wives and mothers. It will be generally agreed that we cannot permanently depend upon recently imported peoples either to perform the so-called menial service of the home, or in largest measure to recruit our population. It will be widely recognized that a sound citizenship and a people capable of establishing and sustaining wholesome standards of living can only be developed under conditions favoring the establishment of a maximum number of relatively small and well-kept families. This condition will also require that very few sound men and women suited to become fathers and mothers shall forego the fine responsibilities of parenthood.

The proper home in such a society will itself be a work of art, and its suitable management will require the skilled service of a well trained woman, willingly accepting such a work as a career reaching over many years and to be entered upon with much forethought. Obviously, the preparation of the young woman for such a career as home-making will be no small task. Her education to this end must itself be a purposeful and scientific affair, and especially so in an age in which custom and tradition as the foundation of practical activities will be still in process of being replaced by definitely scientific procedures. Certain prominent features of that education can even now be forecasted, in the light of current developments.

Above everything else, it will be an education based upon practice, upon doing, followed by comprehension of the theory back of the action. The girl as learner will first make beginnings in the practice of any particular household art, after which she will be led to comprehend the technical—that is, the underlying scientific or artistic—principles of the art, as well as her educational development permits. The general control and administration of all this education will be under schools, because schools are specialized agencies established to give education; but, these schools will utilize, as a most valuable part of their educational ways and means, the homes in which girls live, or work for hire.

It will then be clearly recognized that there are two distinct forms of education in the home-making or household callings, according as the controlling purpose is to establish right standards of *utilization or consumption*, on the one hand, or on the other hand to establish effec-

tive powers of *working, doing, executing or performing*. The pedagogical means and methods of these two forms of education will differ as widely as will the aims to be realized. We can, for example, readily imagine that by 1964 very little of the clothing to be worn by children will be made in the home; and that under such a condition, each woman will receive quite definite training not in the art of making, but in the art of selecting. She may not be trained at all in making clothing of any sort, any more than she is now trained in spinning and weaving. She will be trained to make what the economist calls an effective and intelligent demand, as consumer, on people who make a business of producing clothing, repairing shoes, etc. On the other hand, she may possibly be trained to be an efficient repairer of clothing on her own account. She will be, undoubtedly, trained in the arts of nursing a sick child, but in the field of medicine proper she will be trained chiefly to choose and to use wisely, properly trained medical service. As regards indeed all of the thousand forms of usefulness which the home-maker of the future will render, a fairly sharp distinction in preliminary education will have to be made according as her function is to be, in the first place a producer of utilities or skilled technical service, or in the second place a buyer, chooser and utilizer. A system of home-making education which does not make this fundamental distinction will flounder amidst perpetual confusions and short-comings.

It is to be hoped and expected that in the social economy of the future, household service on a wage basis will be not less attractive than other gainful callings, but rather more so to young unmarried women. The bulk of employed household service of 1964 will probably be given by fairly well trained young women prior to the age of marriage. Society will prize this form of service because it will link up with a systematic training for home-making in a way which will be more effective for all concerned than wage-earning work in the industrial and commercial callings. To help realize this end, obviously, women will have to become better employers than they are at present. Many women today, are, as employers of service, hardly more humane or intelligent than the managers of our worst corporations so far as making for the better development of their employees is concerned. In this respect new ideas and ideals are even now rapidly forming, and with the gradual cessation of immigration, necessity will add pressure to present tendencies to induce women to make

wage-earning household service an attractive and upbuilding force in society.

The first tendency which is, perhaps, wrong in much of the current teaching of Home Economics lies in the direction of its bearing on current over-refinement or over-elaboration of standards of living. We focus our attention so largely upon quality of service, upon standards of taste, that we fail to give sufficient attention to the cost of what we produce in terms of money, time, and energy. Many of us must believe that in middle class society as it is today, an overwhelmingly disproportionate amount of energy is expended upon refinements of personal decoration, household cleanliness, table service and in other related directions. We believe that our attainments in these directions are purchased at the very serious expense of more children in the family, the freedom of development of the children already there, the health of the mother, and the development of all the members of the family along other more wholesome and enduring lines. If it can be demonstrated that in these directions there are at present many harmful tendencies in society, then surely schools of homemaking must set their standards in the direction of simplification, of correct valuation of the relative advantages of different things which painstaking labor and money can procure, and of putting a premium upon what is genuinely higher and more wholesome living. Now, with of course notable exceptions, schools are not yet doing this in any degree adequate to the requirements of the age in which we live.

A second wrong tendency in much of the Home Economics teaching of today, as is found in the prevailing practice of introducing the instruction with the more abstract underlying principles, and in emphasizing these at the expense of the study of their practical application.

Now the one clear object that the layman can discern as guiding in the teaching of Home Economics is the intellectual mastery of certain organized knowledge. To a slight extent, also, it is evident that certain definite forms of skill in execution are made to serve as objectives. But if one asks what more ultimate purpose this knowle'ge or that particular form of skill is to serve in the well-being of the individual or of the society to which he belongs, the replies received will be vague and inconclusive. Some of the larger ends alleged to be held in view are really faith ends, rather than scientific ends—that is, they represent aspirations rather than clearly defined goals, as to which

the stages in the process of realization are capable of definition, attack, and gradual mastery. Courses of instruction in Home Economics as well as classes at work seem to lack a definite and reasoned consciousness of final aim or purpose. In this respect Home Economics is no worse off than many other subjects, especially in the fields of secondary and collegiate education. But because there is here a new field, unhampered by traditions and ancient customs, one is tempted to look for larger manifestations of the scientific constructive spirit than are to be found in the teaching of the historic subjects.

Home Economics will never come into its full heritage until it is organized with definite reference to the attainment of ends that are demonstrably valid and so clearly formulated and evaluated that the efficiency of our procedures—our studies, practices, and methods—can be tested against them. This will require, for one thing, that we decide to what extent vocational aims shall control in our work; that we decide for what vocations we are preparing; and that we unsparingly test the efficacy of the means which we adopt. It means, for another thing, that we decide how far and in what direction Home Economics work is useful as a means of general culture and civic capacity—the development of powers for wise choice and ulitization as against powers of execution; what are the specific forms of this culture and civism that are most worth while and how they shall be attained in the cases of various groups of young people with whom we may deal; and how, again, we shall test the serviceableness of the means employed.

What seems to be another prominent defect in current Home Economics education is its failure to use the living home as a part of its opportunities for coöperative effort and, indeed, as its chief working laboratory. Why should not many phases of Home Economics in secondary schools be so taught that the practical phases of the work can be carried on in the homes of the girls themselves. If students are living under dormitory conditions, why should not these serve as a basis for the practical study and application of such arts as cooking, sewing, etc., by groups of students limited in size?

Reference has already been made to the over-technical and insufficiently practical character of much of the education offered. In part, this is due to the ease with which so-called technical subjects—pure or applied science, applied art, etc.—can be taught in accordance with the traditions of academic education. The most difficult teaching

is that which, proceeding through practice on projects based upon the practical requirements of life, leads into a mastery of the related and needed technical knowledge. But there is abundant experience to show that for most students such an approach, properly made, is the most effective that can be devised.

It is probable that in so far as work in Home Economics is to be regarded as vocational, programs should be so adjusted as to insure a large amount of concentration during the time that the vocational aim is held in view. For example, a day school for home-making should give from six to eight hours per day to that and related subjects; at least half of this time should be spent in the home, working on definite projects which the school has assigned; this work should be supervised by the regular home-making teacher, visiting the girls at work as far as practicable; the school instruction should be based largely upon the practical projects being followed; and general reading in related fields should be a part of the course. A concentrated program of this sort will give more effective results in three months, than years spent on the two or three hours per week plan now so widely in vogue. Such a program would insure that each teacher will learn the requirements, the standards, and the potentialities of the homes of her pupils. She will be compelled to make her teaching practical because to so large an extent the results will have to speak for themselves. Her work should be organized on a definite project basis. This is easy to secure in most phases of the teaching of home-making. Let a girl be responsible for the making of definite articles of clothing; or for the preparation of the family breakfasts for two weeks; or for doing all the baking required for a similar period; or for taking full charge of an infant for a week; or for undertaking a definite assignment of laundry work; or for doing the revarnishing of the furniture of two rooms—these and scores of similar assignments are possible. Of course the teacher should have no more pupils than she can handle effectively.

What is here suggested would doubtless involve almost a revolution in much of the educational practice of our household arts classes. Few, perhaps, will agree with this pedagogical view, but my experience as well as my understanding of recent studies of psychology and pedagogy, convince me that it is in this direction we must look for a genuinely functioning education, especially in the vocational fields. This proposal implies no necessary lessening as to the scope and amount

of study which shall ultimately be given to the principles of science and of pure art as these apply in practice, but it reverses the order of approach and procedure now commonly used.

A distinction may, of course, within limits be drawn as regards this alleged wrong tendency in vocational training, between courses in colleges and technical institutions designed to prepare teachers, administrators, and research specialists, and those other far more numerous courses designed for prospective home-makers and the rank and file of workers. The importance of thorough-going technical training for the former class is freely admitted. It is probable that, because in the earlier institutions dealing with Home Economics the pressure for trained teachers and other leaders was so marked, almost all programs became more or less affected by the somewhat peculiar nature of these demands. It seems to be characteristic of almost all kinds of vocational training to be unduly influenced by the standards appropriate to the exceptional few who will take leading positions.

We shall have to learn that nearly all vocational education—as, indeed, other forms of education also—must be individualized. The teacher must be regarded as a supervisor of apprentices. We coddle too much in our practical classes at present. Each pupil must have his job—a large job, fairly well within his capacity. Much planning and prearrangement will be required. Some directions, read or given, may convey technical knowledge, but the bulk of the technical knowledge should grow out of, and not precede experience. The pupil must early learn to rely largely upon printed or written directions.

It is possible to apply these principles also to evening and part time instruction in home-making, for working girls. Give one evening per week to class-room instruction; and let the teachers give two other evenings per week to visiting the girls in their own homes, while they are at work on the projects assigned.

If we ever come to the point where a considerable number of girls are working as wage-earners in homes, the problems of instruction for these should be simpler still.

Still another deficiency which seems to characterize much of the Home Economics teaching as found in elementary and secondary schools at the present time is failure adequately to take account of the standards of living to which the average American home is necessarily limited. Is it clearly realized that in the large majority of American families in which the husband and father is a wage-earner the total income is less than $1000 a year? Do the programs of Home

Economics instruction now found, especially in our secondary schools, seem to be based upon a clear conception of the necessary limitation as to expenditure existing under these conditions? To what extent are the teachers of Home Economics themselves cognizant of the actual standards of living which must be based upon incomes of this magnitude, or in immigrant centers, the national tastes and habits regarding special dishes? Can it not be charged that our Home Economics teaching today is adjusted too exclusively to standards of living of our middle class population, a level of population where, broadly speaking, the need for this instruction should exist in least degree? We have looked in vain in the programs of most of our systematic Home Economics teaching to find clear indications of a thorough-going realization of the facts here suggested.

SCHOOL LUNCHES

Extracts from reports made by leaders in the school lunch movement in three large cities are here given. As will be seen, the social possibilities of the school lunch are to be regarded as of no less importance than the proper nourishment of the body.

EDUCATIONAL AND SOCIAL POSSIBILITIES OF SCHOOL LUNCHES

MARY E. L. SMALL

To supply the immediate need of food, private philanthropy established in some places the "penny lunch" and while it filled a need, there were many criticisms that it led to pauperizing, to relieving women of maternal responsibility, to creating wrong values and in many instances to promoting wastefulness and disorder.

To take away the stigma of "pauperizing," the city ordinance of Buffalo commands "food to be sold at cost of material"—the fund appropriated being available only for maintenance. Under these conditions, parents in the very best districts have petitioned for the warm lunch for their children, when the distance of the school has precluded the possibility of going home at noon. The children of the well-to-do parents and the children of the poor have learned to sit quietly as one family, to talk pleasantly with each other, to eat their food properly, and many acts of courtesy and generosity have been encouraged.

These lunch rooms reflect the personality of the teacher in charge, and sometimes rooms with a north or west exposure appear to be full of sunshine in the noon hour; the gentle, smiling teacher (of whom the children said, "Oh, we love our cooking teacher!"), the happy children, a flower or two or some growing green things on the white tables, a quotation on the blackboard, with perhaps a picture or two on the walls. A favorite picture for the lunch room is "Thanksgiving" (Jessie Wilcox Smith) and its silent example is much more potent than many words on the subject of thankfulness.

There is much illustrative material ordinarily used in Domestic Science laboratories which is readily adapted to the lunch room, and which adds interest as well as educational value.

The Perry Picture Company has many beautiful copies of fruit, vegetables, nuts and fish. Dr. Langworthy's Food Charts, for sale at the Government Printing Office, are invaluable. These pictures form the subject of many informal lessons in the nature of talks, the children acquiring much valuable information almost unconsciously.

Habits of neatness are inculcated; running water, liquid soap and paper toweling are provided, and the children are required to wash their hands before the meal.

The physiology of digestion is taught in simple talks on what to eat, and when, and how, and why. One principal testifies that since the "Cocoa Treatment" was instituted in her school, she has ceased to doctor children in the afternoon for head and stomach aches.

The nutritive value of the school lunch is undisputed—the social and ethical sides are not so universally recognized except by those in close touch with the work. To those actively engaged this is the most important part of the movement. Perhaps nothing will more clearly express what can be accomplished along these lines than two personal observations.

As a nation we are somewhat lacking in manners; in no case more strongly marked than in the half grown youth, who is apt to be brusque and self-conscious. In one of our schools here, at the end of the luncheon, one can see daily the fifteen or sixteen year old boys, passing through the aisles collecting the trays in an orderly, courteous manner with never a question of the girls sharing in this arduous work, and never a giggle nor nonsensical remark as the boys perform this voluntary task.

In one of our poor districts, poor as regards money, but rich in school spirit and loyalty to ideals, the pupils, for various reasons,

brought their luncheon to school. The girls ate their cold meal in a class room, but the boys in a miserable basement. Upon the installation of equipment to provide hot cocoa to supplement the cold food, permission was granted the boys to share the class room, and this privilege the boys never lost. In a few months all the "newspaper wrapped" lunches had disappeared, and in their places paraffin paper and wrapping paper containing appetising lunches. The spirit of interest and coöperation between principal, teachers, pupils and parents was wonderful. At the end of the first year when the teacher in charge, herself a gentle woman, proposed a birthday party, every child responded with enthusiasm to the suggestion, and boys and girls alike vied with each other in anticipation and effort to make it a gala day; they begged that the members of the commission be invited to share in their party. No brighter, more genial, more truly illuminating scene can be imagined than that of those happy faces, when the birthday cake with its one candle was cut and shared by guests and children. There can be no doubt that more than a penny's worth had passed into their hearts.

In another East Side school where love and generosity reign supreme, the serving of soup or cocoa is presided over by the principal herself. The lunch room is called the "coöperative cafeteria," for everyone delights to help.

We find in those schools where the proper, warm lunch is presided over by a woman of force, ideality and love for her work, children running home at the day's end, happy and cheerful, showing many little acts of kindness for each other, not so commonly seen in schools where this opportunity for personal teaching has not been offered.

NATIONAL CONSERVATION AND NUTRITION DURING CHILDHOOD

MARGARET MCMILLAN

"Thanks be to God we eat plentifully, and be not gone crokyed and hungry as others are!" *Old Chancellor of the Exchequer.*

It has often been noted that great reforms are nearly always brought about by very small and weak creatures. The little child under five years of age has somehow managed to show that the methods of schools for much older children are mostly wrong. The defective or backward have forced the study of brain function and physio-

logical method for the normal. It is now the turn of the poor little starveling to enter the arena, and it looks as if it were going to be the mover in the greatest reforms of all.

Dr. Burney, in the last Report of the Deptford Health Center says that 90 per cent of all children are very well born, but only ten per cent are at all well bred, or rather, well fed. And if the helpless multitude of little creatures could speak and knew what to say there is no doubt that they would cry out in chorus, "Please give us real milk, mother's milk, for nine months if possible, and then go on giving us plenty of good milk fat for years." Alas! the good milk is yet far to seek in many parts of even the great capitals of the world. Thousands of London babies are fed on skimmed milk. Not only rickets, adenoids and anaemia, but also backwardness and every kind of mental shortcoming are associated with this "skimmed," lean, starchy, and faulty diet.

After years of talk, and the appointment of ministers and officials at high salaries, leaders in all the papers say we get a milk bill that does not provide milk. It provides inspection, but no one can live on inspection, except, perhaps the inspector. The inspector regulates, prohibits, and often, it may be, keeps poison out of the home. The business of providing good milk, and bringing that good, pure milk into every home where there is a child or children is not the work of the inspector. Even the latest milk bill excludes the problem of supply. The rich and well-to-do can have good milk; their milk-supply can be made safer; every kind of precaution is taken. Yes, but the birth rate is falling in Mayfair. It is not falling in Shoreditch or Deptford where guaranteed milk will not come. In legislation one has to think of the children of mean streets, because there are the roots of the nation. For good or ill these are to carry on the life of the race, and everything depends therefore on good milk getting into the Deptford or Shoreditch home. It seems reasonable to hope that the great county councils and city councils who engage in so many business enterprises and who supply milk already to hospitals, infirmaries and workhouses should at last start farms and dairies outside of the cities for supplying milk to the children of the people. In any case the problems of education can not be solved till the milk question is settled.

Millions are diagnosed as naturally dull, unfit for secondary education. But why should we jump to such a conclusion? It would be better to try the effect of good feeding in early childhood.

To come now to the child of school age. During the past year two meals were given daily to over forty children in a very poor district of London. These were all anaemic cases, unfit to attend the ordinary schools, and excluded by the doctors of the Health Center. They slept in an open shed throughout the winter and lived entirely out of doors. Breakfast consisted of fine Highland oatmeal porridge with milk. (Every child had a pint of milk daily.) For supper there was boiled pudding, rich in fats with sweet syrup, or vegetable stews with hard proteid biscuits, milk and sometimes hard fruit such as apples.

During the months of October and March the boys put on weight rapidly. The average increase was 6 ounces per week. Formerly, at home, they were probably gaining 1 ounce per week. A few boys remained stationary. One, who made a notable cure from chorea gained nothing in weight. During the summer months the increase was less. The boys gained on an average of 4 to 5 ounces per week.

The girl campers did not stay to supper. They merely slept out and had an oatmeal and milk breakfast at their own camp. Within two months $\frac{3}{4}$ per cent of all the girls gained substantially in weight. Two girls gained over $3\frac{1}{2}$ pounds in a month. One child gained $2\frac{1}{4}$ pounds in three weeks. Another gained 1 pound in three weeks. Three out of seventeen lost weight—one very slightly. As a rule, there was in the case of boys and girls a great increase in weight during the first week after entrance, as usually happens in all such experiments. In the Christmas holidays, at home, the boys lost weight rapidly—the average loss being 8 ounces per week.

The children were greatly improved in appearance. Formerly sallow and pale, they now became blooming, fair-skinned, rosy-cheeked and bright-eyed. The tonic effect of pure air, by day and by night, was doubtless one great cause of the change but the breakfast also had a great effect.

One object in allowing the home to provide the dinner is that in this way the parents may be drawn in to take part in the experiment.

The ideal dining hall should be outside, or rather in the pavilion, or open building of a camp-school. It is impossible to make the surroundings too bright and too lovely. The shed walls should be distempered in light color, and the floor polished and dustless. The smaller tables, with tiny chairs should be put in the middle, and here a monitor should sit. The table should be covered with a snowy cloth, and gay with flowers. Every day children should be appointed

to arrange the flowers, to keep the dishes and dining utensils bright and to arrange the pavilion for dinner. Paper table napkins should be used, and the standard of cleanliness kept high. Every child will take a pride in the cleanliness of his hair, nails, hands, clothes, etc., if encouraged to do so by example, and by having the things he needs for washing.

The supper or meal hour should be for children the happiest of the day. Joy helps digestion. And yet it takes a good deal of time and thought to prepare children of the poorest class for this new happiness. They are used to bolting food, and have no joy at all in eating but the satisfaction of stilling hunger. We have tried at Deptford to have guests to supper at least once every week, usually on Friday. To that day the children now look forward. Some of them sit at the guests' table which is a great privilege. They talk a little at times and they listen to conversation, which is a new and glad experience for them. Sometimes they will fix their eyes wonderingly on the stranger who comes from far off lands. The children at the other table talk freely though no shouting is allowed, and sometimes, if something very interesting or amusing is said at the guest's table they are called on to share it. All troubles and hardships and failures of the day are forgotten.

This eating with the children and making every meal a festival of joy and human fellowship must follow the mere selection of foods, else were the enterprise not worthy of a true democracy. It is the thing that is missed at all mere charitable functions, and it degrades these to the level of mere foddering. At the public dining table, spread by the public spirited, a new order of civilization may be founded.

SCHOOL LUNCH PROGRESS IN NEW YORK

IRA S. WILE, M.D.

The New York School Lunch Committee, in coöperation with the Bureau of Welfare of School Children of the Association for Improving the Condition of the Poor, has maintained a service available to 24,087 children in 17 public schools with a minimum registration number of 123 and a maximum of 2,352, all of them situated in the districts in which the need for such a service is pressing.

In addition to this noon warm lunch service, the Committee has

operated a special 3-cent warm noon lunch of milk and crackers at 10 a.m. for anaemic, ungraded and crippled classes.

The lunch service is operated by virtue of the permission granted to the Committee by the Board of Education. Through its various committees the Board of Education has coöperated in a most encouraging manner.

Too much cannot be said of the valuable aid rendered by the principals in the schools where the lunches are served. It is only by dint of their personal sacrifice and tireless devotion to the cause represented by the Committee that the service has been enabled to take such advanced steps during the past year. The teachers also have given much of their time to assisting in the maintenance of order by children, over which we have no control.

In each central kitchen a manager is in charge, responsible to the supervisor. She is engaged usually for five hours a day, the hours being from 9.00 a.m. to 2.00 p.m. or from 10.00 a.m. to 3 p.m. Her function is to collect the pennies during the noon hour, make whatever cash emergency expenditures may be necessary, order and store surplus food supplies, make periodic statements of the condition of the store-house, submit weighed monthly inventories, be responsible for the cleanliness of the kitchen and the help.

All the food for the 17 schools is prepared in 5 such central kitchens, with 11 associate managers in command, whence the food is distributed to the 12 associated schools. In each associate school there is an associate manager who is immediately responsible to the central kitchen manager for the collection of pennies and the orderly operation of the lunch service.

Through the Food Bureau of the Association we have been enabled to inspect various establishments from which we secure food at a saving of 25 per cent, and are assured that the supply is pure and free from harmful substances.

The Committee has established a system of accounting whereby it is enabled to keep track of the cost of each process in the operation of providing lunches, without laborious examination of the books.

All the menus are prepared by the supervisor. Foods are chosen with special regard to the nutrition contained in them. The variety of foods which we are enabled to offer at one penny a portion is impressive.

A compilation follows:

Soups
- cream of tomato
- tripe
- macaroni
- vegetable
- Scotch broth
- split pea
- clam chowder
- rice
- potato
- potato and barley
- cabbage
- lima beans and barley
- rice and lentils
- peas with noodles
- pea beans with rice
- rice with milk
- obergritz with potatoes
- noodles with milk
- macaroni and tomato
- peas and rice
- lentil
- beans and pasta
- menestra
- rice and tomato
- peas and pasta

Salads
- potato
- tomato
- cabbage
- lentil

Sandwiches
- jam
- egg and onion
- lettuce
- meat and bologna
- pot cheese
- bologna
- American cheese
- butter
- radish

Other dishes
- corn meal pudding
- bread fritters
- rice pudding
- chocolate pudding
- bread pudding
- apples
- apples on stick
- apple sauce
- baked apples
- apple pie
- prunes
- sliced bananas with milk
- grapes
- cocoa
- crackers of all kinds
- jelly cake
- vanilla cake
- sweet chocolate squares
- ice cream

The problem of transporting the food from the central kitchen to the associated schools is a vexing one, but we hope during the next term to install an automobile delivery system which will deliver the food to the schools promptly and with despatch.

At 11.45 in each school a squad of picked pupils set up the tables and prepare to serve the children. The children come from their class rooms, form lines, and as they pass a given point take up a tray, a spoon, and whatever other utensils are necessary. The inflexible rule has been to have each child purchase a half-pint bowl of soup with the first penny, after which there may be purchased any of the items which appear on the table for that day. After receiving the soup the child passes along the table on which the other items of food

are placed. Behind these tables the picked pupils, in white gloves, aprons and caps, hand to the children the food which they wish to purchase. At the end of the line the associate manager stands to receive as many pennies as there are items of food on the tray.

We have taken every possible precaution to minimize the handling of the food by the naked hand. We feel that this is imperative, not alone as it affects the child to whom the food is delivered, but also as it teaches the child the sanitary handling of food in the home.

In order to obviate any possibility of disease transmission in the preparation and handling of food, the Committee asked the Department of Health to make a thorough medical examination of its employees to ascertain whether they were free from disease and the possibility of being disease carriers. Each employee submitted to a stripped examination, throat cultures also being taken for diphtheria bacilli and blood tests being made for typhoid. As an added precaution, facilities for free vaccination against smallpox were offered to each employee who had not been vaccinated within the past three years. This is the first movement of its kind in school lunches taken in this country or abroad, and it is a distinct forward step in preventing school epidemics through food contamination.

The administrative officers have delivered a number of public addresses on school lunches, and have represented the Committee at numerous conferences. The most important are those delivered in the nature of little informal chats with mothers at parents' meetings.

The appeal which school lunches have made has been manifested in more than one instance by mothers who have come to our kitchens to inquire how to prepare the foods which their children have eaten in school, and this help our employees are always willing to render.

During the summer our supervisor was at work, in coöperation with the Cornell Laboratories, upon the standardization of recipes in order to insure uniformity of food value in the portions served. This is one of the most important steps, in so far as it will enable us to determine in terms of caloric value the benefits which a child might reasonably expect to receive from the consumption of our foods.

There is nothing constant about the number of children who purchase food. Rain invariably increases the attendance while on a beautiful day the attendance is perceptibly reduced. The average daily attendance at our tables in 17 schools during the current year has been 3,337, compared with 1,721 in 9 schools last year.

The splendid ground-work laid by the school lunch movement in

past years in New York City is commencing to show its fruits through an increasing recognition on the part of the children that the lunch room provides better food than the street vendor. This is shown by the increased receipts this term in the schools operated the year previous.

	RECEIPTS	NUMBER OF DAYS OF LUNCH SERVICE	AVERAGE RECEIPTS PER DAY PER SCHOOL
1913–14	$7369.07	1321	$5.58
1912–13	6011.37	1261	4.77
Increase, 1913–14	$1357.70	60	.81

A careful analysis of the costs has justified our experiment in the central kitchen field. A comparison of the costs this and last term in the schools operating during those periods shows a net saving of $.0019 per portion on labor costs alone.

Through enlarging the field of work and concentrating the preparation and administration we have been enabled to operate 17 schools, serving 1,249,489 portions, at a net deficit of $4624.52 or $303.58 more than it cost to operate 9 schools the previous year.

Our aim has been to provide for school children who are unable for any reason to procure a warm, nourishing meal at home, a hot lunch at the lowest possible cost. Inasmuch as there are numbers of children who are suffering from malnutrition, which impairs their future mental and physical growth, it is our purpose to demonstrate to the city authorities the social, economic and educational value of a school lunch scheme. There is need for a wider extension of this work than it is possible for our Committee to enter upon in the immediate future. It has been our aim to show to the school authorities that this is their function; that it is being performed by private agencies merely to approach, at an earlier date than is otherwise possible, the transfer of this work to the Board of Education as an integral part of its duties.

It is proposed to organize one additional central kitchen in the crowded lower East Side where 6 schools might be served, with a total registration of 11,464 children. If approved by the Committee, the lunch service will be available to a total of 44,833 school children.

In order to engage upon this further widening of the work of the Committee, we are asking the Board of Education to include in its

budgetary request for 1915 an item of $6339.39 to repair and equip schools for our existing and proposed services. We have the assurance already of the Committee on Care of Buildings that this sum of money will be included in its budget.

HOUSEWORK, ENGLISH AND IMMIGRANTS

EMILY GREENE BALCH

Member of the Late Massachusetts Commission on Immigration

Why not apply the vocational school idea to training immigrant girls for housework? Such a plan, if it could be carried out, might help in the Americanization of the next generation of foreign families. They need a better knowledge of the customs and habits as well as the languages of their adopted country. Miss Balch makes some interesting suggestions along these lines.—*Editor*.

This brief paper is merely to discuss one of those experiments, more or less costly in time and money, that occur to one as very interesting—for some one else to try.

The problem is, on the one hand, the newly arrived immigrant girl, knowing no English and sometimes used more to field work than to kitchen work and quite ignorant of plumbing and urban customs, and, on the other hand, the American household with all its complexities and perplexities.

When, as may happen, the young foreigner falls into the hands of a good housewife who does most of her own work and who is kindly and also skillful in teaching the language and the ways of the new country, this is the simplest solution of the question and the best, except for the strain on the housekeeper and the lack of companions of her own age to learn with, of the one taught. It must be remembered, too, that to teach one's own language is an extremely difficult art—as all know who have suffered at the hands of unskillful foreign teachers. The more unconsciously the language is spoken, the greater the difficulty of giving helpful explanations and general directions. Neither is it easy to teach about household matters sensibly, interestingly and effectively. The capacity to do both things in one is none too easily secured.

But too often the newcomer who goes into housework finds the roughest places and the hardest usage, learning poor English, undesirable methods and sometimes bad morals. She needs to be taught English and helped to a proper situation.

Might not a half time system be worked out here, as it has been in some types of trade training? Suppose that either the morning or afternoon were devoted to learning English and housework, the one through the other, in a school under good teachers and according to the best methods, and that the other part of the day were spent in practising what had been learned, in a paid job of scrubbing, dusting, washing or preparing vegetables for dinner in a restaurant or helping take care of children in a day nursery?

Alternate days of work and teaching might be found more convenient or even alternate weeks. Again it might be practicable to pair the girls, as is often done in vocational training divided between school and work-shop. In Fitchburg, Massachusetts, for example, one boy is at school while the other is working in the machine shop from Monday to the end of the week; Saturday afternoon the boy who has been in the shop explains the job, in which he is engaged, to the other so that he can continue it without interruption and the next Monday they exchange places.

A better modification might, perhaps, be evening schools, where, as has been suggested, English should be taught through the medium of household activities, from the care of a stove to the care of a baby, from marketing to answering the telephone. This would leave the day free for wage earning, though care would have to be taken not to make the regime too severe for the health and spirits of the girl.

Of course we already have evening schools for training in household arts, though not so many nor so adequate as we need. Evening classes especially designed for teaching English to foreign women and girls, we also have though, again, not so many nor so good as we should like. And there are, of course, the various training courses for domestic service, carried on by Young Women's Christian Associations and other groups.

The question raised here is whether there is not a place for a modification of these, such as has been suggested. Perhaps some girls who, on arrival, would be glad to try housework but who are not then available for the kind of place which alone could hold them, might find an opportunity in this way. Perhaps some classes of immigrants, for instance Jewish and Italian girls, who now do not consider housework an eligible employment would do so if they could enter it through the school room and could go to places where their self-respect would be guarded and where the vocational school would keep in touch with their progress and treatment.

The difficulties are obvious. Would there be girls who would care to begin in this way, and if there are, how find them? Would there be employers who would find it worth while to use this kind of help?

Such an experiment as is here discussed could be worked out on a small scale by one competent and friendly woman with small expense of anything save time and trouble, or it could be tried out by some committee or larger organization, or by the school authorities.

The common impression that immigrants arrive wholly at loose ends, without any affiliations whatever, is a mistaken one. The vast majority come to relatives or friends and the way to reach newcomers is less on the dock or at the depot or in the home for immigrants than through "the colony" and those of the group already in town.

Therefore if a committee is formed either to carry on such an experiment or to act in an auxiliary or advisory capacity to it, it would generally be highly desirable to get a priest or rabbi or other trusted representative from each of the nationalities concerned to serve on the board. Their knowledge of the situation will be needed, they alone can secure the kind of publicity essential to success, and their presence will give standing to the enterprise among their own people and will induce confidence.

It is much to be desired that anyone knowing of successful attempts in this field should report them, for the benefit of others interested, to this JOURNAL.

KANAHOAH, THE HOUSE OF FRIENDS[1]

MABEL WARD

Mississippi State College for Women, Columbus, Miss.

The highly specialized equipment used in our fine public schools leaves so little to the imagination and is so unlike that used in any cooking process in the student's own home, that there is a tendency to regard the lessons as something belonging entirely to the school, and having no more connection with the home life than algebra or Latin. Unless something is done to give the home lessons in an environment or with an equipment somewhat similar to that in her own home, the average young student is mentally incapable of making the application of the lesson as it should be made.

[1] See Frontispiece.

For this reason we are advising the Agricultural High Schools and other schools in the South to offer their Home Economics work in small, separate cottages. These cottages, simply planned and built of the material most in use in that particular locality, offer a proper setting for the home making courses and an arrangement more easily imitated than a set room in a large school house. These cottages have a school kitchen where the class work is given and some have a small kitchen fitted up as a home kitchen should be; a dining room; a sewing room; a sitting room which is often combined with the dining room or sewing room; a small bed room and bath. The furnishing and care of this house is part of the regular class instruction, and, although it is of course necessary to teach both cooking and sewing in a special class room, the student may easily find suggestions in this house for improvement in her own home.

With this end in view, that is, to make our Home Economics courses more vital and more easily applied in the home of the students, our practice home was planned and realized.

As we had two large cooking laboratories with dining room, reading room and other rooms we decided to make this house a real home where a certain number of students could live for a certain length of time; do all the work of the house and share all its comforts.

It was decided from the first that in building the house the students themselves should do all the work of construction possible for girls to do. After a consultation of the coöperating departments of Applied Design and Home Economics, it was decided that an eleven-room house accommodating ten girls and an instructor should be built. This was to be of brick veneer and was planned to harmonize with the prevailing architecture on the campus.

The problem of drawing plans for this house was submitted to the home art classes in the fall of 1912 and after careful thought and study, each student submitted her plan of the house proposed. The plan best suited to our needs was then selected and carefully revised so that every room in the house should have cross ventilation; that there should be no dark corners; that all the bedrooms should have closets; and that all the rooms should obtain the sunlight at some time during the day.

The plan was given to a young builder employed by the college who undertook to put it up with our coöperation. Owing to our ideal of the work and to a scarcity of funds, we did not attempt to put the work into the hands of a regular architect or contractor.

During the entire construction the students were constantly present and consultations in regard to the size of pillars, porches and other details of the house were held. The interior of the house was completed entirely under the supervision of the Art and Home Economics Departments, assisted by the president.

Our Practice House which we called *Kanahoah* or the *House of Friends*, stood complete at the beginning of the session of 1913–14 but with all interior woodwork and walls to be finished and with the furniture to be selected. This decoration of the House became the problem of the senior class in Home Economics. The Home Economics work at the Mississippi College is now given as an elective during the junior and senior years with certain pre-requisities required before beginning the junior year. The junior classes have work in elementary food preparation, household chemistry and home art in connection with certain literary branches.

The senior students have advanced food preparation, elective courses in household management, home decoration and dietetics. The house belongs to the senior class and it became their problem to make the interior finishes in application of their courses in home decoration. This same class was to live in the house later on and put into practical use the cooking and dietetics courses.

In preparation for the decoration of the house the methods of finishing woods, floors and walls was made the subject of class lessons. These lessons were then applied in the house during laboratory hours. The interior woodwork was finished in as many different ways as was consistent with a harmonious whole. We have some rooms finished in oil stain, some in alcohol and some in water stain. All the stains, with the exception of the alcohol stain, were made by the instructor, and students and colors were blended to suit their taste. During application, the suitability of the different finishes to pine was discussed and it was decided that the best results were obtained from the oil stain. Some of the bed rooms, the bath rooms and dining room are done in white enamel. Oil stain is used on all the floors and these are finished with various types of varnish and then waxed. On all the other stained wood work a flat wood finish was applied. A summary of this work was made at the end of the year and the wearing quality and ease of cleaning of the different finishes discussed by girls who had the experience of living in the house. It was interesting to see how their ideas had changed after they were obliged to clean the woods for some time.

The walls offered a big problem and their treatment was not wholly a success, owing to the lime in the plaster. These were painted with flat tone washable paint and different colors were used with reference to the location of the room. For instance, the dining room which has a part northern exposure is treated in golden yellow with white woodwork and is generally considered to be the most attractive room in the house.

After the interior of the house was complete the furnishing was attempted. For the bed rooms, high iron twin beds were provided and a very neat little Princess dresser in oak, with straight chair and rocker to match, were ordered from the factory in an unfinished state. These were then stained and waxed or enameled to match the different rooms, the oak, of course, offering a different problem from the pine woodwork. The living room, dining room and kitchen furniture was ordered from catalogs, the students helping to make the selections and keeping a careful account of cost and styles. The hangings were then selected, the cost estimated and the work of hemming and finishing done by the students.

During the session of 1914–1915, it is intended that every senior electing the Home Economics course, shall live in the Practice House for six weeks, and receive one unit of college credit for the work done during this time.

The work of the house is divided into ten duties and these duties with their exact requirements are posted on the wall in the pantry so that every girl may know exactly what is required of her. The planning of meals, ordering, cooking and serving of food, keeping accounts, cleaning and managing the house are all done by the girls with the advise of the instructors.

About one-half of the groceries are bought from the college dormitory and one-half from town markets in as large quantities as possible for use. When the groceries come to the kitchen the cook looks over them and puts her O. K. on the order before it is filed.

The housekeeper keeps strict account in the card catalog and at the end of the month the cards are all compared with the grocers' checks and bill. If correct, they are then handed to the college secretary for settlement. In this way the students get the actual practice in buying but do not handle any of the funds. The per capita allowance of $2 a week has never been fully spent, as $1.80 has been the largest amount so far.

The college Horticulture Department has coöperated with us, and

last year furnished us with celery, lettuce, parsley and other green vegetables throughout the winter.

This year one of our students who belongs to the girls' canning club of the State is putting up large quantities of tomatoes, peas, beans, corn and fruit. We have arranged to buy this from her at the regular wholesale price.

Once during each housekeeper's term of office the dinner is served without a maid. On this day the housekeeper comes in and carefully plans all the courses, arranges the dishes on the rolling tea table which she places at her left. The maid and cook take their places with the family and the lady of the house rises to remove the soiled plates after each course.

The kitchen is well arranged so that the dishes are cleaned and stacked, washed, dried and put away within a small walking circuit.

The dish closet opens from the back into the pantry and from the front into the dining room so that the dishes are put away and removed very easily.

A small gas stove is used in preparing the breakfast and lunch, but a coal range is always used for the dinner so that the students may learn the management and regulation of a range. It is planned next year to put in a good, small dish washer and in this way lighten the labor of the cook and maid.

A small laundry and dairy were built during the present session and will be equipped during the coming year. It is planned to put in modern labor saving devises such as any farmer or housewife will find it possible to afford. Lessons in laundry and care of milk and butter will be given in connection with the work in the Practice House.

As our name Kanahoah indicates we have made every effort to give this house the atmosphere of home. The big living room always has a cheerful fire on winter days; we have a victrola and a piano; friends are always welcome and on Sunday afternoons we are at home and tea is served. The student who is then lady of the house acts as hostess on all these occasions and the living room maid acts as butler to receive the guests and serve any thing needed.

The students are most enthusiastic over their life here and look forward most eagerly to the time for their residence in Kanahoah. In spite of the fact that all lessons continue and that their work is almost doubled, there is never any complaint. The good that it will do in the future can scarcely be estimated. A simple and artistic house; plain softly tinted walls; softly finished woods; attractive and

artistic rugs, hangings and furniture; and flowers which our climate always allows, cannot fail to have their effect upon those who enjoy them daily. The fact that the girls helped to do this house, that it is partly the work of their own hands, and that it all costs so little, renders it possible for everyone to someday embody this ideal of simplicity and beauty in her own home.

This they all expect to do, as is evidenced sometimes by spoken word, sometimes by their faces, and always in their thoughts they plan to some day see the fulfillment in their own homes, of all that they found attractive at Kanahoah.

WHAT FEDERAL MEAT INSPECTION HAS DONE FOR THE COUNTRY

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The fundamental object of federal meat inspection is to protect the people against the use of diseased or unwholesome meat. Notwithstanding the far-reaching nature of the federal law, there are a great many misconceptions as to its application. The Federal Government can take account only of the meat that enters into interstate commerce. It cannot control the meat originating within a State and sold within the borders of that State. This is a fundamental weakness that must be corrected either through uniform state laws or through coöperation between the federal authorities and the state authorities. A great deal of meat that is wholly unfit for food is sold within the State simply because the State cannot or will not enforce the law. Public conscience, however, is being aroused, and reforms are taking place as rapidly as the people will support them. Much harm has been and is being done to the cause of wholesome meat and pure foods by the almost fanatical demands of a comparatively few persons who know or care little about the real situation so long as they can place themselves in the center of the limelight. True reform can come only as a result of patient work, and in strict conformity with scientific and economic truth.

During the past eight years, since the food inspection law has been in active operation, something over three hundred and seventy-eight million animals have been inspected. During that time one and

one-half million whole carcasses have been condemned. There have also been condemned nearly five and one-half million parts of carcasses, and in addition one hundred and eighty million pounds of meat and meat food products have been condemned on reinspection. This enormous quantity of meat unfit for food was thus removed from consumption. It is safe to say that without inspection most of it would have been sold and eaten.

I. Some of the dangers from which inspection affords protection are as follows:

(*a*) Diseases transmissible from animals to man, or as to which there is reason for apprehension that they may possibly be so transmitted, such as anthrax, tuberculosis and cancer. Anthrax is highly dangerous and is easily transmitted to man. Tuberculosis is not so readily contracted from meat as from milk, but is very prevalent and is a source of some danger. Less is known about cancer, but there is some reason to suspect that it may be contracted from eating cancerous meat.

(*b*) Parasites transmissible from animals to man, such as tapeworms and trichinae. Even with careful inspection it is impossible to afford absolute protection against trichinae in uncooked pork, therefore no special inspection is made for these parasites and thorough cooking is recommended as the most effective precaution. But in the case of tapeworms the inspection as now made, in the light of recently acquired knowledge, is believed to be an adequate safeguard.

(*c*) Diseases, parasites and conditions which, while not directly transmissible to man, are likely to cause more or less serious illness in the nature of ptomaine or toxic poisoning, digestive disturbances, dysentery, et cetera. In this class are the septicemias and other conditions.

(*d*) Effects similar to the foregoing that may also be brought about by contamination of products as a result of insanitary conditions and methods of preparation, which are not permitted under the inspection system. In this class are the germs of filth and decomposition, which generate toxins.

(*e*) Preservatives, dyes, et cetera. Some preservatives may be directly injurious to health, while some enable an unscrupulous dealer to conceal dangerous conditions in meat, as, for instance, to give an appearance of soundness to meat that has partly decomposed and is impregnated with toxins. All harmful chemicals are strictly excluded under inspection.

The inspection performs a service of special importance in protecting the consumer against dangers that he cannot detect for himself. Some of the grosser diseased conditions would be apparent to the purchaser of meat in the piece, while other dangerous conditions would never be noticed except by an expert. But when meat is finely cut up, as in sausage, it is a matter of impossibility for the ordinary purchaser to detect disease or danger. It is therefore highly important that there should be an efficient inspection of all ingredients entering into the composition of sausage, before they are chopped up; and this safeguard is provided by the federal meat inspection.

The meat inspection also has a certain esthetic value in that it condemns meat that is merely repulsive or repugnant to the senses without being actually dangerous.

II. The federal meat inspection helps to conserve the country's meat supply. The public interest demands, on the one hand, that no unwholesome meat shall be passed for food, and on the other hand that no safe and wholesome food shall be wasted. While the inspectors rigidly condemn everything that is bad, and their instructions are to give the consumer the benefit of every doubt, careful discrimination is used so as to avoid ruthless waste of good meat. For example, a carcass affected with generalized tuberculosis is entirely condemned, but in certain slight cases of tuberculosis the meat is passed after the affected glands or organs are cut away and condemned. In these slight cases the wholesomeness of the meat is in no wise impaired. Under the new regulations provision has been made for utilizing a class of meat that has heretofore been rendered into lard and tallow.

III. Other economic results of the meat inspection are the prevention of fraud in labeling, and the tracing and eradication of diseases and parasites. The inspection gives no indication of market grades, but it does prevent miscellaneous trimmings from masquerading as "potted ham," and domestic goods from being given a label indicating that they are imported. With the aid of the inspection service it is possible to trace the origin of animals found affected with contagious diseases or with parasites, so that measures may be taken for eradicating the disease or parasites from localities or farms.

IV. The meat inspection has a certain commercial value; indeed, in the beginning the object was commercial rather than sanitary. The inspection is necessary in order that our meats may be accepted by certain foreign countries. In years past a large volume of export

trade was made possible only by inspection. In recent years, however, with the domestic meat shortage and the increased home demand, this export trade has declined.

V. The science of meat inspection has been extended. New light has been thrown on certain animal diseases and parasites in their relation to human health, so that the inspectors may know where to draw the line with safety.

In general, the inspection has brought about great improvement in packing-house construction and methods. Defects and abuses have been remedied and abolished.

THE INFLUENCE OF GLUCOSE ON THE COOKING TEMPERATURES OF CANDY SYRUPS[1]

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The usual ways of determining when candies are sufficiently cooked are first, by testing the consistency of the mixture by cooling a few drops in cold water; second, by means of the thermometer, the temperature of the boiling liquid indicating the degree of concentration.

In looking over a series of recipes for caramels it was found that the cooking tests according to the cold water method of testing are apparently the same, namely, the formation of the hard ball in cold water, but the temperature tests for the different mixtures varied considerably, the range being from 116° to 132°C. For example, the ingredients used in one recipe are as follows: two tablespoonfuls of butter, one-half cup of milk, one-half cup of sugar, one cup of molasses, four squares of chocolate. Directions are given for cooking this mixture to the "brittle" stage when tested in cold water. A table of cooking temperatures for candies in the book from which this recipe was taken does not state to what temperature sugar syrup should be cooked in order to be brittle; hard ball is given as 120°C., small crack as 132°C.; presumably brittle should be interpreted as somewhere between 120°C. and 132°C. This mixture, however, when cooked to 116°C. formed the typical caramel. Another recipe for caramels calls for two cups of brown sugar, one-half cup of milk, one-eighth cup of molasses, one-fourth pound of chocolate. This mixture is to be cooked to 123°C. Other mixtures are to be cooked to 120°C.; and several were found which gave directions for cooking to 116°C.

[1] See also page 482.

The consistency of typical caramels is familiar to most of us. These candies should be firm enough to hold their shape at room temperature and yet should be "chewy." This consistency, if we may draw conclusions from the examples cited, is evidently attained by cooking the various mixtures to different temperatures, or else there is a varying standard for these candies, a theorem which is untenable.

A careful examination of the proportions of ingredients given in the different recipes suggests that there may be some relationship between these and the temperatures to which the mixtures should be cooked in order to produce the desired results. One recipe calls for much milk and butter in proportion to the amount of sugar, while others use more molasses, or glucose, or chocolate. In order to find out what factor or factors influence the temperatures to which these mixtures should be cooked the following investigation was undertaken.

Two typical recipes for caramels were used.

Caramel mixture I	Caramel mixture II
2 cups sugar	1 lb. brown sugar
1 cup glucose	¼ lb. chocolate
3 cups cream	½ cup milk
	½ cup butter
	½ cup molasses
Cook to 116°C.	Cook to 123°C.

Caramel mixture II was cooked as directed to 123°C. The result was the typical caramel, firm but "chewy." Caramel mixture I cooked to 123°C. At this temperature the syrup was brittle when tested in cold water; the resulting candies were much too hard. When the mixture (Caramel I) was cooked to 116°C., the temperature stated in the recipe, typical caramels were produced. The difference in these two recipes, it will be noted, consists, first, (Caramel I) in a larger proportion of glucose to sugar as well as in a larger proportion of liquid (milk); second, (Caramel II) in less glucose (molasses), and less milk, and the addition of chocolate. Caramels were made from recipe I by substituting water for milk, the temperature to which these were cooked being the same as in the former experiment. The flavor and appearance of these candies were somewhat different from those which were made with milk, but the consistency was the same. Caramels were made from recipe I to which six ounces of chocolate were added; these were cooked to the usual temperature, 116°C.

The resulting caramels were typical. Neither chocolate nor a large amount of milk had any influence on the cooking temperature of caramels.

The large proportion of glucose, in caramel mixture I, suggested that this might be the cause of the lower cooking temperature; therefore, candies were made from recipe I in which one-half the amount of glucose was used. These were cooked to the same temperature, namely, 116°C. Others were made with no glucose, the proportion of sugar to cream being the same as in the previous case. Those in which less glucose was used were distinctly softer; those made with no glucose were too soft to hold their shape and lacked the characteristics of caramels. From these results we may conclude that when glucose is used in caramel mixtures a lower cooking temperature is necessary to produce the proper consistency.

In order to test this point further a series of experiments were carried out to determine the temperatures of glucose syrups of different consistencies. A mixture of glucose and water was cooked to the temperatures given for sugar syrups; trials of the glucose syrup were made at these temperatures by means of cold water tests in order to compare them with the standard sugar syrups at these same temperatures. Different proportions of glucose and sugar were similarly tested. The results are summarized in the following table.

Boiling Temperatures of Glucose and Sugar Syrups of Different Consistencies

AMT. OF GLUCOSE	AMT. OF SUGAR	SOFT BALL	HARD BALL	CRACK	HARD CRACK	BARLEY	CARAMEL
		temp. °C.	*temp. °C.*	*temp. °C.*	*temp. °C.*	*temp. °C.*	*temp. °C.*
1 cup		109	114	120	122	128	133
1 cup	1 cup	111	116	122	125	138	142
1 cup	2 cup	112	118	125	135	141	145–150
	2 cups	113	122	132	145	149	154

It will be noted that a syrup made of glucose and water will form a hard ball when tested in cold water at 114°C., whereas the hard ball stage of the sugar syrup is reached at 122°C. The "crack" in the glucose syrup is reached at 120°C., while the sugar syrup does not crack when tested in cold water until the thermometer registers 132°C. Equally striking is the difference between the barley temperatures of the two syrups, one, glucose, forms barley at 128°C., the other, sugar, at 149°C. Glucose begins to caramelize at 133°C.

while sugar caramelizes at 154°C. The trials made with mixtures of sugar and glucose were found to vary directly as the quantity of glucose used; syrups made with the larger proportion of glucose in each case gave the characteristic tests at the lower temperatures.

The temperatures for the different consistencies will vary somewhat according to the standards of the individuals testing. Yet the personal equation cannot explain the wide variations shown in the table given above. No two people can differ in judgment to the extent of twenty degrees in determining when the caramel stage is reached, nor will the opinion of two people vary greatly as to the difference between the hard cracked stage of two syrups. Our table shows that glucose syrup reaches the hard crack stage at 122°C., while sugar syrup reaches this stage at 145°C.

It is obvious from these results that we must revise our temperatures for candy cookery. The tables of temperatures as usually given are intended for candies in which cane sugar is the principal carbohydrate present. When glucose is used in significant quantity lower temperatures give the desired results. By means of the above table cooking temperatures for typical candies in which glucose is used can be easily determined.

SCORE CARDS

Inga M. K. Allison

In the judging of culinary projects there is great diversity of opinion as to what constitutes an excellent loaf of bread, a glass of perfect jelly or a good cake, as the case may be. This is explained in the fact that we have set up so few definite standards of what to expect. Our likes and dislikes often affect our decision to the exclusion of judgment that should result from thoughtful consideration.

The score cards to follow have been prepared as a tentative standard to vary from and as a means of calling attention to the essential points that go to make up quality. It should be understood that they are not presented as the only acceptable standard. Knowledge and individual theories may lead one to attach different values to the points mentioned. These score cards have been formulated by the Department of Home Economics at the Colorado State Agricultural College for use in the College classes and in judging at fairs. In each case the total score for perfection is 100 points.

Score card for bread

	Points	Points
General appearance		15
Color	5	
Shape	5	
Size	5	
Flavor		40
Crumb		40
Texture	10	
Lightness	15	
Moisture	10	
Color	5	
Crust		5

General appearance. In color the loaf should be a uniform golden brown; in shape, oblong; in size, about 9 by 4 by 4 inches.

Flavor. Agreeable to taste, nutty, and with no suggestion of sourness.

Crumb. Lightness—well raised, light in weight in proportion to size, of small even grain, absence of heavy streaks. Texture—tender in crumb, yet not crumbling when compressed. Moisture—slightly moist, yet rebounding when compressed. Greater weight is attached to flavor and crumb because of their importance in making up the perfect loaf.

Crust. Tender, of medium thickness.

In rolls it is not to be expected that crumb can have the same consideration that it does in bread. It is therefore given only twenty points. Since rolls are served uncut, more importance is attached to appearance, giving it twenty-five points.

Score card for cakes

	SPONGE CAKE	BUTTER CAKE	FRUIT CAKE
	Points	Points	Points
General appearance	15	15	15
Color	5		
Size	5		
Shape	5		
Flavor	30	40	40
Crumb	50	40	40
Texture	15	10	10
Lightness	20	15	15
Moisture	10	10	10
Color	5	5	5
Crust	5	5	5

In the card for cake it is understood that cakes are not frosted. Sponge cake includes angel cake and yellow sponge cake—in both of which egg white, not baking power, is intended to be the leavening agent. The terms butter cake and fruit cake are generally understood.

If cakes are iced or frosted 10 points are given to icing (texture 5, appearance, 5), and in the cake score card color and crust are omitted.

General appearance. In color sponge cakes should be light brown; butter cakes golden brown; fruit cake dark brown; but all should be of uniform color. Sponge cakes should be thick, and round or oblong and should round up slightly on top. Fruit cakes should be level. No cake should be too thick to cut to advantage for serving. Cakes of medium size are most acceptable.

Crumb. Texture—tender in grain, break easily and show no sign of doughiness. Lightness—to be graded as excellent, butter cakes must be light in weight in proportion to ingredients used; the grain in a rich cake must be small, even and uniform. Sponge cake must be tender, loose in texture and velvety. Fruit cake necessarily cannot be light but, on the other hand, must not be almost all fruit. Moisture—slightly moist, yet so that it will rebound when pressed with the finger; it is expected that fruit cakes must be more moist than the other types of cakes scored. Color—uniform; fruit cakes should show a decided brown color.

Crust. The crust of the sponge cake should be rough and slightly sugary, of medium thickness; of butter cakes, tender, smooth and not over thick; of fruit cake, rough and not very thick as is often the case.

In appearance icing should be smooth and glossy; in texture, spongy and not brittle so as to crumb when cut, nor so soft as to be sticky.

Score card for pastry and pies

Crust

	Points	*Points*
General appearance		15
Color—degree and evenness of brown	5	
Thickness	10	
Flavor		35
Texture		50

Filling

General appearance		15
Finish	5	
Thickness of finish	10	
Flavor		50
Consistency		35

To be of satisfactory texture pastry should be friable or flaky, this depending upon whether it is plain or flaky pastry. It should be free from toughness and be well baked.

FOOD VALUES OF DIETS IN BRITISH WORKHOUSES

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A recent English report[1] contains rules for the management of workhouses in all departments. Only the regulations for dietaries are here considered. The explicitness characteristic of the phraseology in all British laws and regulations is well illustrated.

For the purposes of dietary administration, inmates are divided into four classes: adults (men and women), not infirm; infirm adults; children under the age of eight years; children above the age of eight years.

Lists of menus for breakfast, supper and dinner are made for each class of inmates. About twenty different breakfast and supper menus, and thirty-nine different dinner menus are given. The regulations specify that supper must consist of foods different from those served for breakfast, and there must be a weekly rotation of meals. An inmate who is doing heavy manual labor shall, with the approval of the medical officer, receive an additional meal every day.

The amount of each serving is expressed in ounces, and any inmate may demand that his allowance be weighed. Children are fed according to appetite and may have more or less than the prescribed ration. A stewed fruit is allowed once a week.

The regulations offer no information, however, about the food value of the rations served, and the purpose of this article is to present the number of calories and the amounts of protein, calcium, phosphorus and iron in the average day's food. As the amounts of food materials allowed for each recipe are specified in the report it is possible to calculate these values with accuracy. In this calculation the food of only one class of inmates was considered--that of adult men, not infirm. The foods may appear to be meager, but calculation of their dietary values indicates that they are sufficient in variety and

[1] The First Report of the Departmental Committee appointed by the President of the Local Government Board with respect to the Poor Law Orders. Presented to both Houses of Parliament by Command of His Majesty. 1913, pp. 1–89.

quantity to offer the elements essential for nutrition, and to furnish energy enough to carry on moderately hard labor.

Several menus for each meal were selected for study. The following tables show the food values of typical menus and the totals differ only slightly from those obtained from the entire study.

Composition of food materials

NAME OF FOOD	ENERGY	PROTEIN	CaO	P_2O_5	Fe
	calories	*grams*	*grams*	*grams*	*grams*
Breakfast					
Bread 4 oz.	293.6	10.51	0.045	0.45	0.00170
Porridge 1½ pt.	679.2	27.36	0.221	1.48	0.00610
Tea { Sugar	56.0				
Tea { Milk	42.2	2.02	0.103	0.13	0.00014
Total	1071.0	39.89	0.369	2.06	0.00794
Dinner					
Mutton boiled 4.5 oz.	306.0	31.8	0.020	0.619	0.00404
Pease Pudding 12 oz.	644.4	4.4	0.238	1.578	0.00953
Total	950.4	36.2	0.258	2.197	0.01357
Supper					
Bread 8 oz.	587.2	21.04	0.091	0.91	0.00340
Butter Milk	162.0	13.61	0.732	1.07	
Total	749.2	34.65	0.823	1.98	0.00340
Total per day	2770.6	110.74	1.450	6.237	0.02491
Extra meal for hard labor	478	22.8	0.513	1.07	0.0017
Total for hard labor	3248.6	133.54	1.963	7.307	0.02661

FOOD VALUE OF ASPARAGUS

Recent analytical work carried on under the auspices of the *Lancet*, London, shows that approximately one-tenth of the raw asparagus shoot is solid matter and of this as much as 70 per cent is soluble in cold water and 80 per cent in boiling water, the constituents thus removed consisting of sugars, gums, proteids, and practically all the phosphoric acid salts. The sugar in asparagus amounts, on an average, to 3.6 per cent; the proteids to 3.8 per cent; the fiber to

1 per cent; the fat to 0.5 per cent; and the mineral matter to 0.8 per cent.

The green variety contains much less fiber than the white, and the green also yields more soluble matter to boiling water and still more to cold water than the fat white stick yields. An important constituent of the tender shoot of asparagus is the basic body vitamin. This occurs in the growing tips of all vegetables, but particularly so in those of asparagus.

The botanical relation of asparagus to the onion family is pointed out, and it is stated that

When the tender shoots of asparagus are left in water for a few days the smell of onions quickly develops and after a time becomes very marked. Again, if asparagus is extracted with ether an oil is obtained which has a faint smell of the raw shoot. This oil, on analysis, proves to contain sulphur. It is probably this sulphur constituent which gives the well known peculiar odor to the kidney excretion after a diet of asparagus [methyl mercaptan], and not the other principle peculiar to asparagus, asparagin.

Asparagus, after boiling for 20 minutes, contains too little nutritive material to make it of any special importance as a foodstuff, though it is valuable as a pleasant adjunct to the meal, and so an undoubted aid in the processes of nutrition. Possibly the nutritive material extracted by boiling may be utilized in asparagus soup.

Vitamin, referred to above as existing in the young and tender shoots of asparagus, is a name applied to a substance or substances recently discovered and seemingly of great physiological importance. Vitamins are widely distributed in foodstuffs, being found in the branny portion of cereals, in beans, and many other foodstuffs. The nature and function of vitamins are being studied by many investigators and it seems clearly demonstrated that such substances are essential to normal nutrition and development, though some differences of opinion are expressed.

The whole subject first assumed prominence in connection with studies of beri-beri—a serious and often fatal disease which is common in the Philippines, Java, and other localities in the Orient among people whose diet consists very largely of rice supplemented by a little fruit, fish, and so on. It was finally shown that the disease was attributable to the use of polished rice and that the use of the unpolished grain or of rice bran—the portion of the grain which contains vitamin—would prevent and sometimes cure beri-beri. It was also learned that the disease could be prevented by adding to the polished rice diet other foods containing vitamin, for instance, beans, instead of rice bran.

How far the facts observed with rice apply to other cereals cannot be definitely stated at present but it has been claimed that a serious physiological disturbance is found among Newfoundland fishermen whose winter diet is made up of white flour supplemented by other foods of limited amount and variety. Whether or not the observed condition is attributable to the flour it is certainly the case that whatever the kind of flour selected such disturbances are not generally observed where the diet is varied. The fair conclusions therefore seem to be that if diet is made up largely of bread, it would be wisest to use flour made from the entire grain; that a varied diet is preferable to a limited one made up of a very few articles; that either kind of rice is wholesome in a mixed diet; and that with a varied diet one can use the breadstuff which seems to him most palatable, all sorts being wholesome under such conditions.

THE CHEMISTRY OF A CUP OF COFFEE[1]

While coffee and tea infusions contain practically no materials of direct food value, except the small amounts of sugar or cream which may be added to them, they produce a stimulating effect upon the vital centers of the body and, by decreasing nervous fatigue, make us less conscious of the fact that we are tired, and thus enable us to do more work. This physiological effect is attributed to the alkaloid caffein which they contain and if the use of coffee or tea is forbidden by a physician it is for the purpose of avoiding the effects of this substance. Therefore, it is of first importance in comparing methods of preparing these beverages to know the amounts of this principle extracted.

According to experiments reported in the *Lancet*,[2] while tea contains from 3 to 4 per cent of caffein, and coffee seldom more than 1 per cent, yet, owing to the much smaller amount of the former used in ordinary household practice, infusions of tea and coffee contain practically equal amounts of caffein in the same volumes of liquid. "The caffein in tea is for the most part combined with tannin in the form of caffein tannate, which is not very soluble in cold water but is easily soluble in hot water," while the caffein in coffee is combined with an acid (called caffetannic acid by some writers) which has different chemical

[1] See also page 480.

[2] *Lancet* [London], 1913, II, No. 22, pp. 1563–1565.

properties from the tannin in tea and is readily soluble in both cold and hot water.

As the caffein tannate of tea is precipitated by weak acids and, therefore, probably by the gastric juice also, it is likely that the caffein in tea is not absorbed until it reaches the alkaline juices of the intestines, while the caffein in coffee, which is soluble in both acids and alkalis, is probably dissolved by the acid gastric juice and absorbed in the stomach. This fact is in harmony with the more rapid and powerful stimulating effect of coffee. While it is claimed that coffee removes drowsiness, in many cases it produces drowsiness which however is soon followed by marked wakefulness.

Although the analyses of hot and cold water infusions of coffee show that cold water extracts from coffee the same weights of caffein, caffetannic acid, and mineral matter as hot water does yet the cold water infusion is much less palatable and lacks the flavor and aroma which are the essential features in making coffee a pleasing beverage, and which the hot water infusion possesses. This is probably due to the fact that the oils and aromatic principles which impart these properties to the infusion are not extracted from the coffee by cold water. The physiological effects of a cold water infusion would probably be the same as those of a hot water infusion except for the importance of these esthetic properties.

Roasting of coffee is wholly for the the effect on flavor. An infusion made with raw coffee has a flat taste and the coffee beans must be roasted, as the aromatic bases and oils which give the coffee its aroma and flavor are formed during the roasting process. It is evident then that these esthetic qualities of the coffee depend to a very great extent upon the care spent in the roasting. During this process there also occurs a caramelization, or formation of definite chemical compounds (brown in color) which are the products of partial oxidation of the carbohydrates in the coffee bean and give to the infusion its characteristic color.

EDITORIALS

Museum Collections and Home Economics. The recent report of the United States National Museum at Washington mentions a matter which is of interest to Home Economics teachers, that is, the growth of its art-textiles collection. The Museum depends for this collection upon the generosity of manufacturers, and its development is making available materials worth the attention of the textile teacher who visits the National Capital. There are other textile collections in the Fine Arts Museum of Boston, the Metropolitan Museum of Art and the American Museum of Natural History of New York, the Field Museum of Chicago and doubtless in many other museums which merit similar attention. Many of these collections also illustrate the history of costume.

Home Economics teachers in all fields should make use of local museums wherever possible; if such museums do not possess collections which illustrate food, clothing, and shelter, their directors might in many cases be interested to begin such collections. The City Museum of Milwaukee, for example, has developed a special service for the schools, by providing a lecturer and special exhibits to aid teachers who bring groups of pupils to the Museum as part of their school work. In New York, loan exhibits in natural history are sent to the schools. In St. Louis, the schools themselves have museum collections which are kept at a central depository and sent out to the schools on requisition; the teacher has a catalog of exhibits, and a delivery service brings the materials requested directly to her building. In England, the Victoria and Albert Museum at South Kensington sends loan exhibits to schools all over England and has thus become an important factor in the development of English technical education. In the United States the museum has not yet been developed as an educational agency and social-betterment institution to the extent that the public library has been developed in the last two decades. The museum has a great future, however, and Home Economics teachers should be interested in its development, should utilize its present resources and work for enlarged museum facilities. Briefly, a national museum policy, viewed from the standpoint of Home Economics, would provide:

1. Local museums in all communities, even in small villages (see account of Haslemere Educational Museum, in Vol. 2, Special Reports of English Board of Education), with collections not only of local geography and natural science, but also of industry and social welfare, including matters of food, clothing and shelter.

2. The circulation of loan exhibits from town to town throughout a state, thus utilizing the dynamic power of novelty, as has been done in tuberculosis, child welfare and other traveling exhibits; in the circulating art exhibits of Indiana and Minnesota; and to some extent in Home Economics exhibits, as in the railroad car exhibits of the agricultural colleges.

3. The use of local museums by school children, in part by visiting the museum, in part by sending loan collections from museums into the schools.

4. The loan of material to schools from central state museums or bureaus. The lantern slides loan of the New York State Education Department is a pioneer enterprise of great promise, and the Cornell University College of Agriculture is regularly circulating exhibits for town and county fairs. Every State should copy this service, and Home Economics teachers should assist in bringing the matter to the attention of the state authorities.

5. The development of school collections and school museums. (See the catalog of the Educational Museum of the St. Louis Public Schools, and especially the article on School Museums in Monroe's "Cyclopedia of Education".) Many Home Economics teachers have already started such collections, for example, a teaching collection of textile samples mounted on cards, each marked with name, price, quality and purpose of the fabric.

6. Increased appropriations for the National Museum at Washington so that it may furnish leadership in a program of museum expansion throughout the United States; and that it may enlarge its undustrial collections and those concerned with social welfare as well as its science collections; the present exhibit in this museum which illustrates the development of artificial illumination, from the pine knot to the latest electric lamp, is typical of what a museum may accomplish in historical collections of interest to Home Economics teachers. Congress should authorize the National Museum to prepare loan collections and to provide, if feasible, a circulating service comparable with that of the English museums. The subjects of food, clothing, and shelter, with which the Home Economics teacher deals, would have an appropriate place in such a program.

The Home Economics teachers of the country can aid in realizing such a program of museum development and extension. Discover what are the present resources of your own school, community and state in the way of objective collections and loan exhibits, available for teaching, and utilize them in your own work. Raise the issue of more objective materials for teaching in educational meetings and bring the matter to the attention of local and state educational authorities. Stand for the museum not only as a community educational enterprise but as a recreative institution which under urban conditions has possibilities not yet commonly appreciated—the museum as distinctly an institution for family recreation.

The Journal a Monthly. Beginning with January 1915 the JOURNAL OF HOME ECONOMICS will be issued as a monthly. This decision has been made at the unanimous request of the members of the Council who are convinced, from a canvass of the situation, that the number of pages now furnished in five installments will be more welcome and better read in smaller monthly numbers. We are confidently assured that the growth in the subscription list will soon justify the additional outlay for furnishing the material in this form.

The Executive Secretary. Miss Anna Barrows of the staff of Teachers College has been engaged by the Council as Executive Secretary for seven months beginning February next. She will promote the interests of the Association in all possible ways. She may be addressed at Teachers College by clubs and local branches who may desire to make dates for addresses or to obtain help in organization. Miss Barrows, services will be given free of charge if her expenses are paid.

Material for Teachers. There is great need of teaching material in the form of charts, outlines, drafts, etc., exclusive of reading matter. Teachers who know of such material will do a valuable service by forwarding to the JOURNAL office sample copies or information as to where such material may be procured, mentioning whether the material is available for free distribution or for sale; also samples of anything of the sort which is valuable though not now available but which might be reprinted.

The JOURNAL will be glad to publish a list of such helps.

HOUSEKEEPERS' DEPARTMENT

The editors of the JOURNAL earnestly request assistance from the readers of this new department. They especially desire suggestions for timely topics on which information should be gathered; data either given directly or by reference to books and articles; and records of personal observation.

"Whoso shall teach me how to eat my meat and take my repose and deal with men without any shame following shall restore the life of man to splendor and make his own name dear to all history."

From Emerson's Essay on Domestic Life.

COÖPERATIVE BUYING

During the past year the editors of the JOURNAL have printed in every issue news of the starting and progress of experiments in the coöperative buying of food. The information has come to us through correspondence and has been verified by personal visits and interviews. There are at present five such enterprises in active operation on the eastern seaboard. Their methods are various, from the simple marketing club which has been so successful in Greensburg, Pennsylvania, to the perfected Rochedale plan, best seen in the store of the Coöperative Society of Montclair, New Jersey. See reports in the February and June JOURNALS.

In the following article will be found statements concerning the movement in England by Mr. Straus, the president of the Society of Thrift who, during the past summer, made a careful study of cooperative stores in that country. There is certainly nothing the matter with the coöperative principle nor with its working out in other countries, but it must be remembered that the English housewife who buys at a coöperative store is following a custom started by her grandmother and made into a family habit by her mother. No general success in this line can be expected in our country until intelligence as to the principles has resulted in a new attitude of mind, a new view point of social and economic relations. This will not be brought about in a day.

For the guidance of those who wish to experiment in coöperative buying the following suggestions are made:

The first requirement is a group of people enthusiastic and intelligent as to the principles of coöperation. Their first step would be to unite ten or more families for buying at wholesale, the food being distributed from some central place. What is offered, in the way of low rates for shipping goods, by the parcels post and by the new produce department of the express companies should be investigated by such groups.

The financial and social experience thus obtained will furnish the only safe basis for a larger venture. The next steps would be learning at first hand the methods followed by existing stores and obtaining a local list of well-known, representative men and women who would stand back of the enterprise and promise to work as unpaid members of a board of managers to direct its policy. Then would come public meetings addressed by speakers who could set forth convincingly the social and economic principles underlying the coöperative store and the practical plans proposed. If, then, a canvass of the town results in subscriptions for the necessary amount of stock there is fair promise of success. One of the most enthusiastic coöperators in the country says, "Do not start a coöperative store until you have to," which means that there is little hope of success without a strong and intelligent backing.

To repeat: There is no educator like the small buying club; it can be safely started anywhere. Out of it may or may not grow the coöperative store. It may be said in passing that good speakers and good educational leaflets on this subject are greatly needed.

In the October JOURNAL a promise was made to report the result of coöperative enterprises in large cities, but, up to the time of writing, they have not been sufficiently worked out to give satisfactory reports.

THE ENGLISH WOMAN AND THE COÖPERATIVE STORE

S. W. STRAUS

President of the American Society for Thrift

During the several months I spent among the coöperative societies in Europe and from investigations made by our society in England and Scotland I found that women's efforts have been the most valuable feature in a great business or "movement" which is stupendous. The women members of the coöperative retail and wholesale societies have done wonders in promoting the sale of honest goods, those in which

deceptions, fraud, substitutions, adulteration, do not take dishonest toll. They have made coöperation a vital force in business in Britain. The victims of war will be distinctly aided by what the coöperative societies and the Women's Guilds have done.

As to the application of coöperative merchandising in this country, there is nothing but ignorance, prejudice and the prodigal spirit of the people to prevent its success. It is proven sound in principle. Whether its principles shall be applied in the United States remains to be determined. It is up to the people themselves. Like the cost of living it is determined by the thrift of individuals. So long as the spirit most in evidence is extravagance, a disregard of the pennies, the growth of coöperation will be slow.

In Europe the gains have been by leaps and bounds in recent years; the number of members of the British Coöperative Societies has increased at the rate of three hundred thousand a year. As for Europe in general, the leaven from the Rochdale idea had leavened a lump of seven thousand and fifty-three societies in 1910 with a total membership of five million one hundred and forty-three, representing that number of homes and families and probably twenty million consumers.

Do you remember that Bronson Alcott, Hawthorne, Emerson and others started in this country the Brook Farm coöperative scheme, which lasted only a few years? Brook Farm may have been founded on too much altruism and too little business enterprise. It also lacked the spur of dire necessity. In England that spur is never lacking and the phenomenal success of the coöperative movement in England is, after all, due to that fact.

One of the meetings out of which the great English Coöperative Wholesale Society arose, actually was held under a railway arch by men who had no other leisure to give for this purpose than their Good Fridays and Christmas Days. Of course, the wholesale society, as its name implies, was meant to be simply a market for the retail societies, in which they could buy without fear of deceit or false dealing or boycott and through which the small and the large buyer had equal opportunity to obtain pure and honest goods. But the nation-wide proprietors of each federation discovered that they could carry their unity a stage further by starting factories to supply their own organized market. Out of this discovery has grown the present interdependent chain of sixty productive factories owned by the English Coöperative Wholesale Society, employing twenty-three thousand workers in various parts of the country and producing goods to the

value of about eight millions sterling yearly—a growing factor in the stupendous total of merchandising by the Coöperative Societies.

The whole of this vast organization remains, however, entirely responsive under the democratic system to the two million individual working men and women coöperators whose weekly purchases are the basis of the whole. And although the women last year had gone only so far as to put a number of their sisters upon the management committees of retail societies, the number of women is rapidly growing; they come into direct relation with the wholesale society through buying its products under the society's brands and the annual meeting this spring showed that before long the women will hold many seats on the board of the wholesale federation. There is nothing in the rules to stop them, for this great movement is as entirely free and democratic as anything to be found between the Pacific and Atlantic coasts of America.

It is a common saying that the English "C.W.S" will supply any article from an elephant to a pin, and certainly on one occasion a store member in a dilemma not only got his furniture for his new home from the central warehouses of the federation, but, at an hour's notice, from amongst the clerks a gap in his wedding arrangements was filled by a "best man" also.

THE MATTRESS

HARRIETTE T. RICHARDSON

Two laws protect the purchaser of a mattress in the State of New York. The first governs the re-selling of mattresses and prevents hucksters from collecting and disposing of those discarded and left upon the streets or presenting them for sale in second-hand stores. The second law does not allow a shop to send out returned goods and has been in effect since January, 1914.

The essential difference between the feather bed and the mattress is the use of a narrow strip attached to all four sides and called the border. The border provides the mattress with an even height and is only $2\frac{1}{2}$ inches and unstitched in the cheaper mattresses, but as high as 6 inches in fine grades where as many as five rows of stitching hold the filling from bulging at the sides and keep the lines true and firm. In the more luxurious makes the edges are finished with the imperial roll border which requires from 5 to 10 pounds more filling than is the rule. This firm finish sustains the body pressure even to the edge of the bed.

Another point of difference between the feather bed and the mattress is the symmetrical tufting which creates an even surface and a non-breakable filling. In some instances lacing is used in place of tufting, allowing the mattress to be loosened or tightened at will. This method of obtaining an even distribution of pressure is recommended where the mattress is subjected to unusual weight and strain.

The tick is to be found in three grades. The heavy twill costing 28 cents per yard, which requires no lining and wears indefinitely; the creton, 25 cents per yard and 18 inches wide which exhibits a wide choice of delicate colors, but is of limited wearing quality, and requires a lining adding $4 to the expense; the linen, 65 cents per yard, and over 50 inches wide which affords daintiness in design and color, but requires an interlining at an additional cost of $7.

Filling may be seen in nine distinct materials. They are straw, excelsior and wood shavings, corn cob, African fibre (a grass with unbreakable stems), tampico or shredded palm leaves, silk floss, cotton felt (to be found in two grades, the dark and the light), and most important of all, the three grades of hair—gray, black and white. Less commonly used in this country is lamb's wool in two qualities, the French and the American, which differs slightly in price, the imported being the more costly.

The combinations of African fibre with hair, tampico, white hair and cotton, the three grades of hair with cotton felt, and hair with lamb's wool, would seem to offer a bewildering choice. When, however, durability and resiliency are required the choice is easy.

In the first five grades and in the darker felt neither durability nor resiliency can be claimed. The life of the felting is short and it soon becomes matted.

The flaked cotton mattress is guaranteed for five years' wear, perhaps longer. It has been developed under different forms—tufted and untufted, and provides a clean and comfortable bed at a reasonable price. The tufted mattress receives the cotton after carding and combing and is built layer upon layer in felts which are pressed into position; while the untufted mattress is made by shredding the cotton, blowing it through a tube into the tick, and pressing with hydraulic pressure. The cost of these mattresses which may be bought with or without the imperial roll is from ten to twenty dollars.

The most important kind of filling is horse hair; and since hair has been brought from Argentina and Uraguay the hair mattress has come into common use.

The charge has been made that horse hair is unhygienic and a carrier of disease and that it is cut from dead and diseased animals. This is a mistake. The Vice Consul of Cordoba certifies that in the last thirty years the hair exported has been cut semi-annually from live and healthy horses. The fact that all leading hospitals and colleges prefer it to any other filling and that the United States Navy uses nothing else seems to vouch for its merit. The very processes necessary for its preparation are sanitary in the highest degree.

When received at the factories it is sterilized by boiling in water with chemicals to remove the natural oils, dust and vermin. The black, gray and white hairs of both mane and tails are separated, spun into ropes and boiled once more to set the curl. These ropes are allowed to stand for months, the longer the hair remains in the ropes the longer it will keep its spring. It is imported in ropes. The white hair is bleached and handled quite by itself.

When the tick is ready for filling the ropes are opened, handfuls of the springy masses are thrown into it and the mattress sewed and tufted. In renovation the process is nearly the same as in the original filling.

The cost of a pure hair mattress varies from $23 to $100. The weight is more variable than the price but averages within the limits of 25 and 40 pounds for a single bed and 35 and 50 pounds for a double bed. Many combinations of hair with other fillings are offered but sound judgment recommends the purchase of pure hair if only of the medium grade. In making a final decision it will be remembered however that for comfort the cotton mattress ranks with the medium grade of hair while its cost is hardly one-half. In durability no product out-ranks horse hair, as is shown by the fact that some hair mattresses have been known to keep their resiliency for over fifty years. If we give this fact due weight the hair mattress would be the cheapest.

MAYONNAISE DRESSING[1]

From studies of mayonnaise dressing in regard to the process of emulsification of an oil and egg yolk, or substitute, together with flavorings; the variations of the substitutes and of the oils, and the resulting

[1] Extracts from A Study of Mayonnaise made by Margery Johnstone, University of Washington, Seattle, Washington.

variations in texture, color, flavor, the keeping qualities and the nutritive values and prices, the following conclusions are drawn:

As a base for the mayonnaise dressing, for the yolk of egg, there can be substituted successfully the white of egg, condensed milk, gelatin, beef extract and gum arabic. The emulsion will be as complete as the one made with the yolk, but the nutritive value will be decreased. At the usual prices the cost of a dressing made with gelatin or condensed milk will be one and one-half to two cents less than one made with egg yolk but the nutritive value will be less; with beef extract, or gum arabic the cost will be one and one-half to two cents more than one made with egg yolk, while the nutritive value will be negligible as compared to that of the egg yolk in the standard dressing.

For the standard dressing the following proportions were used: ½ cup oil, 1 egg yolk, 2 tablespoonfuls acid (vinegar or lemon juice), ¼ teaspoonful salt, with paprika, mustard, cayenne, and sugar to taste.

In the other dressings the proportions were the same, but for one egg yolk there was substituted—1 egg white; 1 tablespoonful of condensed milk; ⅛ teaspoonful gelatin in 1 tablespoonful water, heated to dissolve and then cooled to 70°F.; 1 teaspoonful beef extract with 1 teaspoonful cold water; ½ teaspoonful powdered gum arabic in 4 teaspoonfuls water.

The oils can be interchanged with no difference in the texture of the emulsion and in nutritive value, but the cost will vary—cotton-seed oil being the least expensive tested, peanut next, and olive oil the most expensive. With most people no difference can be detected between olive oil and a good brand of cotton-seed oil when served on a salad. Some grades of peanut oil are not pleasing to the taste. Fine grades of peanut oil are of good flavor.

In quantity, the dressing may be increased to double its bulk without diminishing the flavor by adding a seasoned corn-starch of a consistency similar to the mayonnaise, or the white of egg beaten stiff may be used as a diluent.

The experiments show that a mayonnaise dressing made with vinegar instead of lemon juice is less liable to mold. Even if bacterial decomposition and growth of mould do not occur, the emulsion by its nature is not permanent. The dressing should be kept in an air-tight jar in a cool place.

FACTORS OF BREADMAKING[1]

How frequently the hostess who does her own cooking has to apologize because her bread is too dry, too light, too coarse or perhaps is even sour. Why not know the cause and effect in regard to each factor and be sure of satisfactory results? The waste of time and material in experimenting has been saved for you by Miss Williams whose conclusions are here given.

Dough. Moderately stiff dough gives a loaf that is more rounded on top, more compact, of finer texture, whiter, dryer crumb, and richer color of crust, than does soft dough.

Liquid. Water gives a whiter bread, of finer texture, sweeter flavor, but less elasticity and greater tendency to dry out than does any other liquid. Milk makes a somewhat more elastic loaf with a deeper colored crust. Potato water hastens the time of rising, makes an especially spongy loaf, and markedly increases the keeping qualities.

Kind and amount of yeast. The use of compressed yeast allows the wheat grain to retain its sweet nutty flavor. Potato liquid yeast gives the most elastic bread with the best keeping qualities. Starters made from the dough or sponge are very likely to produce sour bread, and for that reason are not to be recommended.

Good compressed yeast can be used to as high an amount as 4 cakes to the loaf without tasting. The bread, however, becomes somewhat tasteless, lacking the delicate flavor of the wheat grain. For this reason the use of a large amount of yeast is more satisfactory in rolls where flavoring materials, such as butter and sugar, are added. The loaf is much more likely to rise high and burst open during baking, but the texture is made finer by increase of yeast. When a good quality of yeast is used an increase up to 2 cakes of compressed yeast to the loaf could be recommended for shortening time and producing better bread.

Rising. Repeated risings, even without kneading, give increase in fineness of texture, whiteness of crumb, and silkiness. Each time the dough is light it may be cut back, thus allowing the gas to escape. If bread must stand for some length of time before baking, and there is danger of souring, cutting back will enable the dough to stand an even longer time than usual without deterioration of flavor.

The cause of much coarseness in bread is overlightness, and this may easily be remedied by putting the bread into the oven sooner. The degree of lightness in the second rising determines the fineness of texture. This fineness is not lessened by overlightness in the first

[1] For further details see "Results of a Study of the Factors of Breadmaking," by Anna W. Williams. JOURNAL OF HOME ECONOMICS, 1914, February, pp. 21–28.

rising, and the bread is more elastic and silky for having reached its maximum expansion once during the process.

Kneading. Improvement in texture due to kneading after the dough has become smooth and satiny is not in proportion to the increase in labor. There is, undoubtedly, a marked difference in texture due to manner of kneading. The most effective stroke is long, firm and even, covering all portions of the dough alike, and yet quick so that the dough may be kept constantly in motion.

Loaves, which are lightly molded, without kneading, are superior in all points except in fineness and evenness of texture.

Temperature. Overheating of the dough gives a loaf of small volume, coarse texture, dark crumb, and dull, unattractive crust. Chilling the dough tends to lessen its volume and to produce compactness, coarseness, and toughness of crumb. The later in the process the chilling occurs the less influence it has upon the bread. There is very little difference in the short process bread raised at the temperatures of 26° and 40°C. (about 79° and 104°F.). Such difference is not enough to justify the additional length of time demanded by the lower temperature.

Baking. Too high a temperature for the first fifteen minutes produces a hard, tough crust, and loss of brightness, while a tender, crisp, bright colored crust, and a loaf of fine texture, tenderness and silkiness are obtained by putting a loaf doubled in bulk into a moderate oven (180°C., or 356°F.) for the first ten minutes, at the end of which the bread is crusted over and beginning to brown in patches; for the next fifteen minutes gradually increasing the temperature to 235°C., or 455°F. when the rich brown color of the crust is obtained; and then finishing the baking in a moderately hot oven, so that the crust does not darken any further. In such an oven forty-five minutes is sufficient for the single loaf.

Keeping. Stickiness or sliminess in the center of the loaf is due to a bacillus which is usually found in the flour. Thorough baking does not kill the organism, although it does somewhat retard its growth. The remedy lies first in the removal of the source of the organism. This can be done only by discarding the flour and sunning, airing, and scouring all bins, boards, and utensils for days, after which a fresh supply of flour may be obtained. The organism may be prevented from developing in the bread by keeping the loaf in a dry and especially in a cool place. In a sample made from badly infected flour the bacillus failed to develop in the ice box. Bread made with buttermilk as the liquid also fails to develop ropiness.

THE BEST METHOD FOR MAKING COFFEE[1]

A series of experiments were recently carried out by Wilcox and Aborn[2] to determine the best method for making coffee. Seven tablespoonfuls of coffee were used with six cups of water which was regarded as the usual household allowance. The infusions were prepared by four different methods, as follows: boiling, in which medium ground coffee was placed in cold water, heated to the boiling point and then boiled for five minutes, after which the grounds were settled by the addition of a little cold water and the infusion poured off; steeping, in which the grounds were settled and the infusion poured off as soon as the boiling point was reached; percolation, in which the finely ground coffee was used and the directions furnished by the manufacturers of the percolators followed; and filtration, in which the required amount of actively boiling water was poured once through the pulverized coffee contained in a fine muslin bag.

These experiments showed that the strength of the infusion depends upon the fineness to which the coffee is ground rather than upon the time of cooking. It is essential to grind the coffee just before using, as ground coffee loses its flavor very rapidly on standing, even when kept in tin cans and for as short a time as four days. This would seem to demonstrate the advantage of the method adopted by some housekeepers of buying unground coffee and grinding the required amount each morning.

A long period of cooking extracts a greater proportion of the tannin, which imparts a bitter taste to the infusion, than of the aromatic substances which produce the flavor and aroma. Thus, in percolation where the water is forced up and flows down through the coffee several times and is in contact with the coffee for a long period, more tannin is extracted; and the water which is considerably below the boiling point when it reaches the coffee does not extract so large a proportion of the flavor-giving ingredients. On the other hand, in the method of filtration, which is recommended as best bringing out the distinctive qualities of different coffees and producing the most agreeable flavors in the infusions, actively boiling water and pulverized coffee are used. The water is then at the most efficient temperature for extracting the aromatic bodies and the coffee is in the most efficient state for the extraction of these flavor-giving qualities.

[1] See also page 466.

[2] *Pure Products*, 9, 1913, no. 12, pp. 611–615; *Tea and Coffee Trade Jour.*, 25, 1913, no. 6, pp. 568–574.

Accurate measurement of coffee, water, and time of cooking were found to be necessary for the production of an infusion of high quality and uniformity.

Clearing the coffee by straining is recommended rather than by the addition of an egg, as the former method introduces no foreign substances into the infusion.

From these experiments the following recipe has been prepared which will enable the housekeeper to make a clear coffee of pleasing color, taste, aroma, and flavor, with utensils found in any kitchen. This is essentially the method used in preparing the so-called "drip coffee."

On a piece of fine muslin securely fastened over the top of an ordinary coffee pot or pitcher, place seven tablespoonfuls of finely ground or pulverized coffee. Pour through this, just once, a small portion at a time, six cups of actively boiling water. The muslin should be rinsed out and kept in cold water (which must be changed every day) until used again. The cloth will then keep sweet much better than if allowed to dry. The actively boiling water and finely ground coffee are absolutely necessary.

HEATING TESTS OF HARD AND SOFT COAL AND BRIQUETTES FOR HOUSEHOLD USE

As a part of the fuel briquetting investigations carried out by the United States Bureau of Mines and reported by C. L. Wright, fifty-eight tests were made with a sectional boiler and were run for about eight hours at a steam pressure of 2 to 3 pounds—conditions comparable to those of the average house heating boilers.

The results of these tests show that in such a boiler the heating value of the different fuels depends upon the number of heat units which they contain; that the harder coals, those which contain the higher percentages of fixed carbon, are more efficient and give less trouble from smoke but under some conditions where the difference in price of hard, or anthracite coal, and soft, or bituminous coal, is very great, the use of the latter for house heating purposes is more economical than the former. For example, in a given locality where hard coal costs $8 per ton and soft coal $4 per ton, according to the results of these experiments it would cost 52 cents to convert a given weight of water into steam using hard coal as a fuel and only about 24 cents if soft coal were used. It must be remembered, however, that soft coal is much dirtier to handle, gives off much more soot and smoke, and the fire requires more attention than is the case with hard coal.

Briquettes are made by mixing coal dust with a pitch binder and subjecting the mass to great pressure. It is then cut into pieces of the shape of a brick and pierced with holes to allow the passage of air through it.

Although briquettes are much more common in Europe, their use in this country is gradually increasing each year. In many parts of the country where good hard or soft coals are very expensive there are large supplies of low grade coals which could be briquetted successfully and a much cheaper fuel produced for household heating.

A comparison of large and small briquettes showed the former to be more efficient than the latter. The briquettes kindled readily from a wood fire and burned well, but there was considerable difficulty in obtaining a complete combustion, which reduced the average efficiency.

By use of proper methods and less volatile binders than those now in common use, cheaper fuels, such as finely broken coal which is apt to be wasted at the mine and low grade coals, like lignite, both of which are not suitable for general use as fuel may be utilized by briquetting. The advantages possessed by properly prepared briquettes over these low grade fuels are principally as follows: A more thorough combustion is obtained without the formation of clinkers; the fuel does not cake and cut off the draft of the fire; there is less soot and smoke produced; the fuel has a higher heating value; and less care is required in running the fire.

THE INFLUENCE OF GLUCOSE ON THE COOKING TEMPERATURES OF CANDY SYRUPS[1]

AMY DANIELS

There are two ways of determining when candy syrups are sufficiently cooked, first the method used by most amateurs which consists in testing the consistency of a boiling syrup by dropping a small amount of it into cold water; second the more exact method employed by professional candy makers which consists in determining the boiling temperature of syrups of different consistencies. For example, the housekeeper cooks candy syrups to the soft or hard ball stage, the crack, hard crack or caramel stage. These she is able to determine fairly accurately by the means described. The professional candy maker who must produce candies of uniform quality must have a more

[1] See also page 457.

accurate method, therefore he uses the thermometer in order to determine just when the various stages are reached.

When sucrose (cane sugar) is the principal sugar used in the candy mixture the following temperatures are given by syrups of different consistencies:

Soft Ball	113° C.[2]	Hard Crack	145° C.
Hard Ball	122° C.	Barley	149° C.
Crack	132° C.	Caramel	154° C.

But when a considerable amount of glucose is used in the candy these consistencies are reached at lower temperatures. For example, when two parts of cane sugar are used to one part of glucose the typical consistencies are reached at the following temperatures:

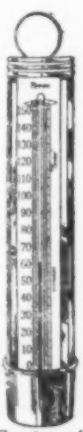
Soft Ball	112° C.	Hard Crack	135° C.
Hard Ball	118° C.	Barley	141° C.
Crack	125° C.	Caramel	144–150° C.

When equal quantities of glucose and cane sugar are used the syrups register as follows:

Soft Ball	111° C.	Hard Crack	125° C.
Hard Ball	116° C.	Barley	138° C.
Crack	122° C.	Caramel	142° C.

When glucose alone is used the typical consistencies are reached at even lower temperatures:

Soft Ball	110° C.	Hard Crack	122° C.
Hard Ball	114° C.	Barley	128° C.
Crack	120° C.	Caramel	133° C.



Courtesy of Eimer and Amend

The amateur candy maker who wishes to perfect her products will find that more uniform results will be obtained if she follows the example of the professional worker and uses a thermometer in order to determine when candy syrups are sufficiently cooked. A glass stemmed thermometer registering as high as 200° centigrade can be purchased through any druggist for about $1.25. In using these, care should be taken that the bulb is completely submerged in the boiling liquid, otherwise the mercury will register too low; but

[2] Some cookery books give cooking temperatures for candies according to the Fahrenheit scale. To change the above to Fahrenheit multiply by $\frac{9}{5}$ and add 32.

this bulb should at no time rest on the bottom of the kettle, for there the temperature will be higher than that of the boiling liquid. Candy thermometers which are so constructed that the registering stem is encased in a copper frame are on the market, but these are much more expensive and no more satisfactory.

A thermometer which sells at $2.50 is shown in the accompanying cut on page 483.

STREAKINESS OF CHOCOLATE ON CANDIES[1]

"When covering chocolate is poured into a bright tin mould, allowed to cool and then taken out, the surface of the chocolate which has cooled out of contact with air is bright and glossy. If chocolate of the same temperature is used for covering pieces of glacé fruits or any substance used as a center, and cooled in contact with the atmosphere, the surface is sometimes streaky and mottled. What causes this streakiness? (I am quite aware of the fact that the temperature of the covering chocolate is important and that if used too warm it will streak and be dull.)"

Covering chocolate appears to be essentially ground cocoa bean mixed with sugar. The cocoa-fat in one sample examined was 36 per cent. On heating, the cocoa butter melts and the insoluble substances are suspended.

Experiments show that if kept at a temperature much higher than the melting point of cocoa butter (30° to 34°C.) the suspended matter tends to separate unequally. This is seen well if microscopic slides are prepared with the well-mixed melted material.

Some chocolate covering was melted in watch glasses and kept at temperatures from 80° to 130°C. for some time without stirring, and then allowed to cool. The higher the temperature the worse the surface became and streaks of lighter material were observed separating from the brown cocoa particles. The rusty or streaky appearance on chocolates appears therefore to be caused by unequal distribution of the brown cocoa particles and the colorless cocoa starch in the fatty medium. So long as the covering chocolate remains liquid or soft, the particles tend to aggregate, and so unequal coloring is produced. If the fat is too liquid there is time for it to fall away slightly from the surface and leave it roughened with the powdered cocoa. This obviously will not happen when the surface of the choco-

[1] From *The Epicure*, 21, 1914, no. 248, p. 124.

late cools quickly in contact with a metallic surface (metals being relatively good conductors of heat), and especially if the metallic surface be smooth.

THE USE OF GELATINES[1]

It is well known to the cook that commercial brands of gelatine differ in their gelatinizing power; how widely they differ will be seen by the following table which resulted from a student's study of the subject after carefully calculating the cost of the amount of each brand required to make a pint of clear, firm jelly.

Comparison of costs of different brands

MATERIAL	AMOUNT OF GELATINE USED	COST OF GELATINE
	tablespoonfuls	*cents*
Brand A	1⅛	2.5
Brand B	3¾	2.0
Brand C	2⅛	7.5
Brand D	1	3.0
Brand E	2⅓	3.3

To the above cost per pint must be added from 3½ to 4½ cents for sugar and flavoring used. The total cost for a pint of jelly made by using various preparations containing sugar and flavoring is about 10 cents.

In making jelly from gelatine it was found that the addition of very acid fruit juice tends to lessen the gelatinizing process.

The effect of boiling on gelatinization was found to be negligible unless continued for more than fifteen minutes. Boiling for thirty minutes produced a less firm jelly and for forty-five minutes, a decidedly soft jelly. Adding boiling water to the gelatine after soaking in cold water does not always dissolve every particle of it but boiling for a few minutes will thoroughly dissolve the gelatine and produce a clear jelly.

Although gelatine is a nitrogenous substance it does not equal some other proteins in value, nor does it take their place in building or repairing the tissues of the body and therefore should not be depended upon as a substitute for such proteins.

[1] Compiled from Gelatine as Food, a thesis by Ruth Klein. Senior Normal Work, 1913, School of Household Science and Arts, Pratt Institute.

TWO EXTREMES IN NUTRITION

Two studies recently made by European scientists[1] illustrate the wide range in nutritive conditions to which the human being can adapt himself.

In one case an Eskimo on the Island of Disco in Western Greenland consumed in one day 1804 grams (nearly four pounds) of boiled meat corresponding to 85 grams of nitrogen and 218 grams of fat. This is said to be far below the record figure among these people who eat very large meals at irregular and somewhat infrequent intervals. Nutritive disorders are rare among them and their physical endurance and resistance to cold is very high. The utilization of the above meal was found to be very satisfactory.

The other study was of a man in Copenhagen "who was able to maintain himself in excellent nutritive equilibrium and muscular efficiency through long periods of months, not merely days, on a diet essentially composed of potatoes and margarin." Four pounds of potatoes were eaten daily, yielding 3.62 grams of digestible nitrogen which with the margarin amounted to 3900 calories. When hard work had to be performed this man ate 8 pounds of potatoes with liberal additions of fat so that the entire energy content was brought up to 5000 calories with 10 grams of digestible nitrogen. "No dilatation of the stomach resulted from these monster meals."

Such curiosities of the literature of nutrition simply show the great adaptability of the human organism which has enabled man to live in every region of the earth. This subject is still further illustrated by Dr. Meltzer's interesting paper.[2] It is needless to say that neither the maximum nor the minimum of any nutritive element is desirable. The normal individual lives in the safe medium.

[1] A Study of the Diet and Metabolism of Eskimos. A. and M. Krough, Copenhagen, Bianco Luno, 1913.

Studies of Protein Minimum, M. Hindhede, *Skand. Arch. Physiol.*, 30, 1913, no. 1–3, pp. 97–182, 228, figs. 5.

[2] The Factor of Safety in the Human Body. S. J. Meltzer, *Jour. Amer. Med. Assn.*, 48, 1907, no. 8, pp. 655–664; and *Jour. Amer. Med. Assn.*, 25, 1907, no. 639, pp. 481–498.

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Any book or periodical mentioned in this department may be obtained through the JOURNAL OF HOME ECONOMICS at the price listed.

The Care of the Child. By Nathan Oppenheim. New York: The Macmillan Company, pp. 308. $1.25. By mail of the Journal, $1.32.

This book gives simple and straightforward directions for the care of the child. The aim is to impress the mother with her responsibility in the physical development of her child. "The cry, 'Give us labor,' is right," he says, "for no one can live without work and enough work. But let us beware lest we look far off for this opportunity to expend our energy and develop our character, while we are unmindful of the opportunities which lie immediately before us—'Give us labor' is a good enough cry, but 'Let us do better the labor that is within our hands,' is a better."

Following this introduction are chapters on the various phases of the physical development of the child, one chapter on the education of the child, and a chapter on the relation of parents to children. In all these chapters the subject is treated in such a way as to give the unthinking woman a realization of the importance of her work, and at the same time to give much useful information to the mother seeking it. This information is not given in the dogmatic way so often employed in such books, but the reasons are given in a simple and interesting manner.

This is a book which can be recommended to the young mother on account of the simple, straightforward treatment of the subject, and the breadth of interest it gives to the discussions. Since this edition was published in 1910 some of the latest theories along the different lines are not incorporated. Especially is this noticeable in the chapter on feeding. On page 86 there is an evident misprint in the statement, "An alkaline milk will change blue litmus paper red." Since the whole subject of infant feeding is so important and there have been so many recent advances along this line, it is hoped that at least this portion of the book will be revised and brought up to date.

The Development of the Child. By Nathan Oppenheim. New York: The Macmillan Company, 1913, pp. 296. $1.25. By mail of the Journal, $1.35.

This is a companion book to the above. It takes up the discussion of the mental development of the child. Starting out with a biological discussion of the comparative development of the child, and a discussion of the comparative importance of heredity and environment, the author follows these by a discussion of the different factors of importance in the child's environment and the effect they have upon the mental, moral and social development of the child. The whole book tends to emphasize the importance of training and the right of every child not only to the best physical care but also to the development of his better self which can come only through the different social agencies, the school, the church, institutional life, society at large, and, most important of all, the home.

The real point of the whole book might be considered the discussion of the right of every child to a normal home life, and the value of such life in the training and development of the child.

The last chapter discusses the responsibilities of women as mothers and makes a plea for their training for this important duty. It contains an interesting comparison of the education planned to decorate a woman, with that planned to fit her for the profession which the majority of women pursue.

The Human Body and its Enemies. By Carl Hartman and Lewis Bibb, M.D. Yonkers-on-Hudson, N. Y.: World Book Company, pp. 350. $0.65. By mail of the Journal, $0.75.

First Book of Health. By Carl Hartman and Lewis Bibb, M.D. Yonkers-on-Hudson, N. Y.: World Book Company. $0.35. By mail of the Journal, $0.40.

"The Human Body and its Enemies" is a book treating of physiology, hygiene and sanitation for "pupils in the lower grades." It is written by a professor of zoölogy and a physician in Texas, and contains many local references; yet most of what is said would apply anywhere, particularly in rural sections. It is an interesting and for the most part successful attempt to popularize a great body of applied science. It is ambitious in scope; it treats, among many other things, of the structure of cereal grains, and of home-made ice boxes; of diphtheria carriers, and of the tsetse fly; of peristalsis, and of sanitary milk production; of the manufacture of vaccines and antitoxins, and of the formation of the retinal image; of meningitis and pellegra, of soap leaves, and adjustable school seats; of the cuts of beef, and of the reactions of a frog without a cerebellum; of the causes of swell-heads in canned vegetables, and of the structure of uriniferous tubules. All this constitutes rather a large contract for the dispensing of information, yet the book seems for the most part accurate and up-to-date in its statements, particularly so when dealing with the subject matter of bacteriology, microbiology, and personal hygiene. Treatment of physiological material is not always quite so fortunate in this respect, and there are a few unhappy misstatements, from the twentieth century point of view; for example, the time-honored but now antiquated explanations for the necessity of ventilation, the description of methods said to result in sufficient humidity of indoor air, the incomplete tabulation of the various digestive enzymes and their action. But the great value of the book, as the present writer sees it, is in its illuminating and exceedingly practical and concrete treatment of the many and various subjects presented. Many apparently involved details are so clearly explained and shown to be so exceedingly important in their bearing upon everyday conduct, that it would seem the book cannot fail to do much good. Moreover, the glittering generality so commonly found in books on hygiene has been replaced very largely by precise scientific data, actual statistics, and practical formulae; for example, under disinfectants, we have, besides the usual material (value of sunlight, soap and water, boiling temperature, etc.), also a table showing how long it takes given strengths of solutions of boric acid, carbolic acid, and corrosive sublimate, to destroy pus germs, typhoid bacilli, and anthrax spores; also explicit directions for the permanganate-and-formaldehyde method of disinfecting a room.

The illustrations are numerous and original; many of them are excellent, both from the scientific and from the practical teaching point of view; a few seem some-

what superfluous. The domestic science teacher will perhaps wonder why the milk bottles in the open refrigerator shown, could not have been placed on the bottom shelf!

In the opinion of the reviewer, who has had a considerable teaching experience in public schools, the book might be used as a supplementary text or reader in the upper grammar grades, although pedagogically the arrangement of subject matter is unfortunate in some respects, as all the physiology is placed in the latter half of the book; for example, it is a little difficult to explain intestinal infections if pupils have no clear idea as to what and where the intestines may be. A further objection not difficult to forsee is, that much of the subject matter would be unfamiliar to teachers, for not even among high school teachers of physiology can we assume a knowledge of bacteriology. However, let us hope that this is an objection which will in time be removed, and that the thorough training in microbiology required of domestic science teachers will open the way toward more general requirements for other science teachers.

"The First Book of Health" contains some of the same subject matter in still simpler form, for younger children—those perhaps of the fourth grammar grade.

Training the Girl. By William A. McKeever. New York: The Macmillan Company, 1914, pp. 432. $1.50. By mail of the Journal, $1.62.

This is a companion volume to the recently published Training the Boy by the same author. It is equally readable and suggestive. Clothes for the girl, When is a girl ready to marry, Marks of a worthy young man, Motherhood, The attainment of peace and poise, are topics whose discussion may easily drop from the good to the "goody-good." But the author has kept his discussion on a plane of commonsense, and his remarks and conclusions are wholesome and stimulating.

The book is divided into four parts: Industrial Training; Social Training, Vocational Training, and Service Training. As stated in the preface, the author attempts to offer a plan for "whole life" girl training.

Industrial Training, as treated, gives to the term "industrial" a meaning quite different from that which has come to be attached to the word as used in recent discussions of industrial education. It covers the home opportunities and duties for educative work, and the school training from kindergarten to college. A very helpful chapter is devoted to "Home and school coöperations." Throughout this part of the book, emphasis is laid upon the forms of participation, in which the girl may engage at various stages of her development, which tend to make her efficient as a member of society and as a home maker. It is worth while to have it repeated again and again in some form that character is a product of one's own efforts and that it can be developed in neither girls nor boys without a reasonable amount of real work.

Social Training includes chapters on Play, The psychology of the girl's clothes, Vacations, the Camp Fire girls, Social activities, and The girl and the sex problem. Parties, going with the boys, teaching the girl about herself, and other equally troublesome problems to many parents are discusssed with a conservative liberality which will help many and offend none.

Vocational Training contains six chapters in which are discussed the double vocational problem for many women—that of home making considered as fundamental for all, and that of independent, self-support confronting so many and a contingency which circumstances may enforce upon any.

In the final part of the book under Service Training, six chapters treat of the girl's education and training in serving others—in the home, through opportunities of religious organizations, through participation in other organizations for civic and social betterment, and through the everyday activities of the common life.

Throughout the book there breathes the spirit of democracy. Secret societies in the high school are condemned as endangering the girl's attitude through a period when the cultivation of sympathies and ideals should be broad and inclusive. The dangers of narrowness and snobbishness in college sororities lead the author to advise against them also.

Thirty-seven well chosen illustrations add to the attractiveness of the book, and a well organized table of contents and an index make possible quick and accurate reference to any topic discussed.

The book is suggestive and wholesome. It should be helpful to parents and teachers or any others engaged in the direction and leadership of girls and young women.

Vocations for Girls. By E. W. Weaver. New York: A. S. Barnes Company, 1913, pp. 200. $0.75. By mail of the Journal, $0.80.

The first chapter of this book contains an exhaustive list of vocations open to the girl with limited education, covering commercial, industrial, artistic and professional fields. Accompanying the list is the wholesome advice that the girl who reads should consider first of all those occupations open to her in her own town.

The book is simply written, rather in the form of a textbook, each chapter being followed by practical exercises, questions for debate, topics for study and research, and an index of vocational literature. At the end is given, alphabetically, a list of possible occupations, and a cross reference list of schools in New York offering special training for women. While the book as a whole advances no essentially new ideas, it deals with an interesting subject in a very logical and readable way.

Vocations for Girls. By Mary A. Laselle and Katherine E. Wiley. Boston: Houghton, Mifflin Company, 1913, pp. 139. $0.85. By mail of the Journal, $0.92.

This book, written by two teachers in a large high school, contains much advisory material both for the girl choosing a vocation and for those concerned in helping her to make the choice.

Many possibilities, from domestic service and factory work to teaching and the library, are discussed, the advantages and disadvantages of each being impartially reviewed.

Although the book is primarily written for the girl who cannot afford a long and expensive education, the importance of a sound educational basis for any vocation is emphasized. A plea is made that the school curriculum should provide a truer adjustment to contemporary life, should offer to each individual girl opportunity to develop her natural bent.

Young Working Girls. By Robert A. Woods and Albert I. Kennedy. Boston: Houghton, Mifflin Company, 1913, pp. 185. $1.00. By mail of the Journal, $1.08.

This most interesting little book deals with the many sided problem of the adolescent girl of the tenement house, factory and department store.

It is a composite statement of facts gleaned by two thousand social workers in twenty different cities, and represents the first coöperative work of the National Federation of Settlements, formed in 1911.

The first five chapters deal with the girl as she is, handicapped by her environment and her inadequate home life, lacking in ideals, constantly drawn by her natural love of pleasure and display into paths of temptation and moral danger.

The remaining nine chapters, while they do not attempt an actual solution of the problem presented, lay down principles for a possible course of procedure and point to the settlement as the logical source of assistance.

The book will appeal not alone to those actively engaged in philanthropic work, but to every one whose social conscience has been awakened to a sense of responsibility.

A Model Housing Law. By Lawrence Veiller. New York: Survey Associates, 1914, pp. 343. $2.00 postpaid.

To the worker for better social conditions in whatever field, there must come, sooner or later, the realization that he is struggling with a problem of wide ramifications and of definite relation to organic laws, and that his problem will always remain unsolved and the difficulties remain insurmountable until he has the assistance of the law and, what is more, the sympathetic interpretation of the law.

It has been said that in the United States more than half the public offices, nearly sixty per cent, in fact, are filled by lawyers or men of legal training, and that the reason Germany has better social and economic laws is because of the much smaller percentage of offices filled by men of legal training.

Laws to be effective must serve specific needs and should therefore be the work of specialists, not of the advocate, for the law is not the end but merely the means to an end.

Such a book as is presented in "A Model Housing Law" must be of inestimable value and service to those seeking for improved conditions for community living, than which there can be no more vital question. The value of this work lies not in the fact that it is perfect in all its deductions, or that it presents a ready-to-hand law that will fit every or any case, but that in concise form it gives us at once the ideas and conceptions of a trained man and an expert, and his faithful collaboration of the things worth while in existing laws. It should save many hours of study for the individual, committee or commission engaged in the work of improved housing.

Good housing for the poor can never be practically accomplished save by adequate housing laws, for, while the building of a few model houses, subsidized possibly in part, here and there throughout a community may help to make possible the wiping out of a slum, and to inspire a few with the desire for better living, yet it is the plain duty of any city or town to prevent the occupation of buildings unfit as well as to prevent the erection of those that may become unfit, and to so plan the city block as to encourage and make possible the types of houses serving best the needs of its own people.

Housing and city planning can never be disassociated, nor can either be sure of accomplishment save by intelligent laws dealing directly with the ends sought. Mr. Veiller points the way most authoritively.

A Survey of the Woman Problem. By Rosa Mayreder. New York: George H. Doran Company, pp. 275. $1.50. By mail of the Journal, $1.62.

An essential for interest in further literature on this subject is well met in the new form of treatment which this book presents. Not wholly in agreement with the Woman's Movement the author regards it, nevertheless, "as one of the phenomena which honorably distinguish the present epoch from all previous periods of history; nay, more, it seems to be one of the finest manifestations of an epoch which otherwise, in its poverty of ideals, of noble feelings, and of passionate beliefs, betrays evidence of degeneration."

As the most widely diverse assertions are quoted one after the other, one is forced to accept the author's statement that "from whatever point of view we may consider the problems that relate to women we are certain to encounter something hopelessly contradictory. Nowhere else do such extreme antitheses lie so closely parallel to one another."

The treatment of the subject is far from a superficial or simple one. The vigorous style and logical reasoning as well as intimate knowledge of a large number of authorities reveals the characteristics of the German student. The nature of the arguments are from the ethical-psychological standpoint rather than the political, the economic or the social. While recognition is given the fact that the movement has become a practical one through the economic revolution, emphasis is placed upon its idealistic rather than materialistic origin and that "whatever vantage ground woman may gain through economic betterment will avail little toward her freedom unless quite other influences begin to operate in her favor." While deploring the present limitations of sex, both male and female, there is no note of pessimism in the work, but, rather, the assertion that, "If we trace the lines of the past which lead forward into the future, we find in unmistakable outlines the ideal of a humanity in which sex has a better and happier significance than it has hitherto possessed."

The nature of the best and most suggestive portions of the book may be realized from such striking sentences as the following, which, together with its admirable, if lengthy, historical survey of the subject, make a book well worth careful reading.

"We shall be able to know what women are only when we no longer dictate to them what they should be."

"The bicycle has done more for the emancipation of woman than all the strivings of the entire Woman's Movement taken together."

Practical Dietetics. By Alida Frances Pattee. Mt. Vernon, N. Y.: A. F. Pattee, 8th edition, pp. 475. $1.50. With Handbag Diet Book, $1.75.

This book is excellently planned for the nurse's use by one who understands the nurse's needs. It contains up-to-date theory and well tried recipes. It is not too technical for a beginner, and puts in clear words the theories necessary for the understanding of the food problem. Altogether it seems to be a very comprehensive volume but small enough for the trained nurse to slip into her bag in going to a "case." A great variety of foods are represented which are suitable for all kinds of invalid diet and the total energy value of most, if not all, have been given. This will be useful in computing the total values of food combinations and in calculating amounts of protein, fat and carbohydrate in any dietary whenever required, without the tedious mathematical process usually involved. Part III is also of interest to the trained

nurse as it gives both general and special diets used in many hospitals. Quotations from well known writers are to be found under the titles of various diseases which give the dietetic treatment. The chapter on Infant Feeding is somewhat antequated. The book continues with the diet of young children, the diet during adolesence and old age. The state board examination questions are useful for the nurse studying for her examination.

Food as Body Fuel. By H. P. Armsby. *Pennsylvania Sta. Bul. 126, 1913, pp. 59–68.*

The animal as a prime motor, energy, transformations in the body, and the origin of animal heat, are discussed and a brief summary is given of the author's investitions and the work of others which has to do with these questions.

The results presented, he concludes, may be taken "as demonstrating that the animal heat arises exclusively from the combustions in the body, but they have a much broader significance. They show that the transformations of chemical energy into heat and w[illegible] in the animal body take place according to the same general laws and with the same equivalencies as in our artificial motors and in lifeless matter generally. The great law of the conservation of energy rules in the animal mechanism, whether in man, carnivora or heribvora, just as in the engine. The body neither manufactures nor destroys energy. All that it gives out it gets from its food and all that is supplied in its food is sooner or later recovered in some form. We are fully justified, therefore, in speaking of the food as body fuel, and in our studies of its utilization we may be confident that any food energy which does not reappear in the form of heat or work has not been lost but has been stored up in the body as the chemical energy of meat, fat, etc., which may later serve to supply food energy to the human body when consumed as food by man."

Candies and Bon Bons and How to Make Them. By Marion H. Neil. Philadelphia: David McKay, 1913, pp. 287. $1. By mail of the Journal, $1.10.

The aim of this book as stated by the author is, "To satisfy the increasing demand for a practical book on making candy and bon bons." She follows this by the statement, "Experience has proved the reliability of all the recipes and in every case I have striven to put the matter in as plain a form as possible."

The book contains chapters on utensils for candy making; materials used; tables, weights and measures; preparation hints; and numerous recipes. Only a very small proportion of the space is devoted to any theoretical discussion. The following quotations may be taken as indicative of the character of such discussions. "Parents do their children a great injury by denying good, pure candy. The child requires a large amount of sugar, for sugar assists in the processes of growth as no other food element can possibly do. Children of an older growth, too, require a proper amount of good, pure sugar candy. For these white crystals feed the ever burning flame of the body supplying animal heat which is life and arousing the nervous energies, in some cases even better than phosphates." (Page 20). "Glucose or starch sugar is made from corn starch, which is as natural a product as cane sugar. It is prepared by the action of a dilute solution upon corn starch." (Page 21).

The statement, "Cream of tartar or tartaric acid may take the place of glucose in some recipes, as they also tend to prevent granulation," on page 21 is followed by

further explanation. On page 79 we find the statement, "When the syrup first boils add the glucose or the cream of tartar; this cuts the grain, somewhat reduces the strength of the sugar, and helps to keep it creamy and soft." There seems to be no very good reason for her dogmatic statement on page 81 that glucose should be added after the sugar is dissolved.

The recipes are not very well organized. This means more elaboration of detail and repetition than would otherwise be necessary. We find the same brittle candy repeated six times under six different names. The only change being in two cases peanuts were used instead of almonds, in one case confectioner's sugar was used which is more expensive but does not give any different results from the granulated sugar, and in another case lump sugar was used which certainly would be more difficult to handle and more expensive, and is only a survival of the time when loaf sugar was less likely to be adulterated than other kinds. These recipes are: chocolate nugatine, page 71; nougat paste, page 101; caramel nougat, page 95; peanut taffy, page 160; French candy, page 180; peanut cracker, page 255. Other similar forms of repetition could be noted.

The details of the experiment are not always accurately stated. On page 71 honey alone is put in a saucepan and stirred until dissolved. On page 26 the author speaks of melting sugar in water. Cream of tartar is frequently added in pinches rather than being measured.

We would question the necessity for some of the details given in the recipes. Page 197, lemon juice and soda are dissolved in boiling water and then added. Page 198, tartaric acid is used but is not added until after the candy is done. Unless used for flavor what function does this acid perform here? In several recipes a teaspoonful of glucose is called for, in many cases being used in connection with some other kind of syrup. Page 255, sugar is called for twice. Page 143, the butter is divided into three portions and added at three different temperatures. Lump sugar is frequently called for. Is there any advantage in this?

This book is suggestive in offering different ways and combinations for making candy. The reader may judge of its value and accuracy from the above quotations.

Around-the-World Cook Book. By Mary Louise Barroll. New York: The Century Company, pp. 360. $1.50. By mail of the Journal, $1.62.

The housewife of today will find in this book a valuable addition to her culinary library. The casual observer is much disappointed in looking through the book to find an entire absence of illustrations so commonly used in similar publications. Its pages are replete with compilations of recipes which cover a wide range of cookery and are suggestive and stimulating. As no standard measurements are maintained throughout the work it is a more helpful guide to the experienced than to the inexperienced.

The American Cook Book. By Janet McKenzie Hill. Boston: Boston Cooking School Magazine Company, 1914, pp. 8 + 255, pls. 16. $1. By mail of the Journal, $1.10.

A large number of recipes are brought together for preparing meat, fish, fruits, vegetables, and other foods for the table. The author points out that in the case of recipes "it is well to note the essentials and the nonessentials that make up its

content. Nonessentials are usually added for variety in flavor or appearance, and if not agreeable may be eliminated without detriment to the dish; at the same time let no one forget that flavor in food is a prime requisite and it must be brought out or retained in the viand as the case may demand."

Cooking Notes for Voluntary Aid Cooks. By Miss B. H. Davy. Exeter: M. A. Rudd and Son, 1913, pp. 90. 1 shilling. Reviewed in Brit. Med. Journ., 1913, no. 2739, pp. 1372–1373.

Cooking for large numbers with limited equipment, British Army requirements for training of cooks, cooking problems, and related questions are discussed and recipes are given. The reviewer states that the book is useful for yachtsmen, campers, etc., as well as for the special purpose for which it is designed.

Simple Garments for Children (from 4 to 14). By M. B. Lynge. London and New York: Longmans, Green and Company, 1913, pp. xvi + 47, patterns 10, pls. 6. $1.25. By mail of the Journal, $1.30.

This is a book written with the purpose of teaching methods of making hygienic clothing for children. Its plea is against the number of weighty garments worn by children. The book is not intended for the use of beginners, but rather for those who have a knowledge of sewing. It contains a set of patterns for use in cutting the garments suggested in its pages, and also directions for knitting undergarments, jerseys, stockings, etc.

As a practical guide to workers in this country, the book has little value. Machine-made, knitted underwear, inexpensive, of good shape, and bearing the Consumers' League label would be urged upon the busy mothers rather than additional hours of labor spent in knitting.

The making of other garments has its strong appeal, but the patterns furnished are not fully explained, and the methods of making are incomplete.

A Study of the Foot and Foot Wear. By F. W. Weed. Military Surg., 30, 1912, No 2, pp. 170–211, figs. 23.

Though written with special reference to military requirements, this article presents a large amount of information of general interest with reference to the structure of the foot, determining the requirements for foot wear, and similar topics.

According to the author's deductions and conclusions, the strength of a foot varies in proportion to the potentiality of the supinator group of muscles. Weakness in a foot may be prevented by proper exercises and foot wear, while incipient foot weakness may be accurately determined by means of proper apparatus such as is described in the article. A poorly fitting stocking, that is, one which is too tight, is almost as productive of bad effects as is a small shoe. "The most common direct results are ingrown nail and hallux valgus, though crumpled toes may be due in large part to too short a stocking and it may contribute to the more serious effects of a narrow shoe. . . .

"A foot measuring $10\frac{3}{8}$ inches in length and $3\frac{3}{4}$ inches in width can not wear a stocking under size 11 without there being a constant tendency to the production of ingrown nail, hallux valgus, crumpled toes, etc. . . . . The thicker the stocking, the greater the degree of compression on the foot, naturally, so this remark applies particularly to the thicker stockings used in marching."

"The style or contour of a shoe should be so designed that its effects on the foot for which it is intended will be least harmful. The contour of a shoe which is recommended for army wear should conform to basic principles, summed up as follows:

"The inside line of the forward part of the shoe should form a straight line, or one approximately so. The inward twist at the shank should not be too great, however, else corns are apt to develop on the smaller toes. There should be an abundance of room across the ball of the foot.

"The sole should be flat across, to preserve a secure foundation for the foot, but may have a slight upward curve at its forward end to prevent the toe catching in unevenly raised places on the walking surface.

"The heel, when it is indispensable, as in the military service, should be low, broad, long and flat.

"The fit of a shoe is correlative to its contour. Pressure on the forefoot results in a pathological weakening of the mechanism, varving in proportion to intermittency and amount, more especially when there are other contributing influences. The best efforts of a foot can not be put forth when its intrinsic muscles are inactive from pressure atrophy. At the same time, a shoe to be of any service or comfort, must be so fitted, that when in motion, there will be a minimum of friction between the foot and shoe.

"Stability may be attained by a close fit back of the mid-tarsus, where lateral pressure at the heel, and from the heel, forward and upward to the front of the ankle joint, and around the ankle, will have no undue influence on the integrity of the foot."

A bibliography is appended to the article.

BOOKS RECEIVED

Household Physics. By Alfred M. Butler. Boston: Whitcomb & Barrows. 1914. Pp. 382. $1.30. By mail of the Journal, $1.42.

Physics of the Household. By Carlton Lynde. New York: The Macmillan Company. 1914. Pp. 313. $1.25. By mail of the Journal, $1.40.

Elementary Household Chemistry. By J. F. Snell. New York: The Macmillan Company. 1914. Pp. 307. $1.25. By mail of the Journal, $1.40.

General Chemistry. By Lyman C. Newell. New York: D. C. Heath & Company. 1914. Pp. 584. $1.20. By mail of the Journal, $1.30.

Source Chemistry and Use of Food Products. By E. H. Bailey. Philadelphia: P. Blakiston's Sons and Company. 1914. Pp. 517. $1.60. By mail of the Journal, $1.80.

Experimental Domestic Science. By R. H. Jones. Philadelphia: J. P. Lippincott Company. Pp. 235. $0.80. By mail of the Journal, $0.88.

Domestic Science Principles and Application. By Pearl Bailey. St. Paul: Webb Publishing Company. 1914. Pp. 343. $1. By mail of the Journal, $1.12.

Principles of Cooking. By Emma Conley. New York: American Book Company. 1914. Pp. 206. $0.52. By mail of the Journal $0.60.

The Work-a-day Girl. By Clara E. Laughlin. New York: Fleming H. Revell Company. 1913. Pp. 320. $1.50. By mail of the Journal, $1.65.

NEWS FROM THE FIELD

The Michigan Home Economics Association. The Association met Friday, October 30, in Kalamazoo, Michigan.

Miss Blackman, of the State Normal College, Ypsilanti, spoke on "Practical Household Management in the Elementary and High Schools."

Dean Georgia L. White of Michigan Agricultural College spoke on "The Modern Home."

Miss Martha Van Rensselaer, President of the National Home Economics Association, gave the address of the afternoon.

After this program the annual business meeting was held.

Washington, D.C., Home Economics Association. The regular meeting of the Association was held on Tuesday, October 6, at the Public Library. Miss Julia Lathrop was scheduled to speak at the meeting, but was unable to do so.

The meeting opened with the reading of the minutes, and the reports. Following this was a discussion regarding the work to be undertaken during the year, and the subjects which would be of most general interest. The opinions of the individual members are to be ascertained before definite plans are made.

Miss Emma S. Jacobs was appointed chairman of a committee, whose duty is to assist, in such ways as may be desired, one of the district nurses in the city.

The Home Economics Association of Greater New York. In response to a request from Mr. Routzhan, who represents the Russell Sage Foundation, an effort is being made to assemble illustrative material for teaching household arts subjects, this to be available as a permanent exhibit. It is Mr. Routzhan's purpose that this material be so arranged that it could be easily sent from place to place for the use of schools, colleges, and other institutions. The President appointed the following committees representing the various phases of household arts work: Miss Anna Barrows, Chairman; Miss Helen L. Johnson and Miss Emma Gunther, Administration; Miss Margaret McGowin and Miss Laura I. Baldt, Domestic Art; Miss Elizabeth Condit and Miss Fannie Perkins, Domestic Science.

Mr. John Purroy Mitchel, Mayor of New York, has appointed a committee now known as the "Mayor's Food Committee." The members of this group have been very active in their efforts to lower the cost of living, first, by establishing several municipal markets; second, by educating the public through printed leaflets; third, by securing the coöperation of the schools.

The Home Economics Association of Greater New York asked the Mayor for a speaker for October 29 in order that the teachers may coöperate most wisely in this work.

The Home Economics Association of Philadelphia. The first meeting in the fall was held at the William Penn High School, and took the form of a social meeting. Mr. Frazee, the superintendent of vocational education in the Philadelphia public schools, gave the address.

The executive committee laid before the society the plans for the study classes for the winter. Miss Winslow, of Columbia University, will lead these classes, one on the Budget, the other on Nutrition. They will meet every other week for a course of ten lectures and discussions. A class in dietetics with laboratory work will be formed, if there is sufficient call for it. It will be taught by Miss Hannah Hill, instructor at Drexel Institute.

An effort is being made to extend the work and sphere of influence of the association, that all who are interested in the development of the home and the city may share in this unequalled opportunity which the association has opened for us by its winter plans.

South Carolina Home Economics Association. This association which was organized last March has outlined for its first year's work the planning of Home Economics courses for the schools of the state, and then trying to get the state board of education to accept these courses. It is hoped in this way to unify the work.

The need of a state supervisor in Home Economics is felt and it is possible that one may be secured through the efforts of this association.

Miss Mary B. McGowan, the Secretary, has just been promoted to the position of Head of the Domestic Science Department of Winthrop College, Rock Hill, S. C.

Teachers College, Columbia University. Mrs. Grace Hitchings Buckner, instructor in costume design in the department of household arts, Teachers College, spent the month of June in the famous dressmaking establishment of Worth in Paris, securing special practice in design. A year or two ago Mr. Jacques Worth visited the School of Practical Arts, Teachers College, addressed the students and became interested in Mrs. Buckner's work in costume design. As a result he opened the way for Mrs. Buckner to enjoy the unique opportunity of working in the famous Paris establishment.

Extension Schools in Home Economics. Among its other interests, the Department of Home Economics at the New York State College of Agriculture has provided about thirty extension schools in Home Economics during the college year 1913–1914.

Miss Miriam Birdseye has been employed by the college to present the work in Home Economics continuously from December 1 to April 1. In addition, regular members of the staff have visited these schools when there was an unusual demand for lectures in any one week. The value of the schools is in the presentation of definite instruction for a continuous time, which is better than the occasional lecture.

Continuation Classes of Montclair, N. J. Perhaps the most striking instance of continuation classes in household arts for home women is the group of short courses instituted by the public schools of Montclair, New Jersey, organized in 1913–1914, which were attended by upwards of 200 women. They were held in the public school laboratories and were taught by the regular teachers of household arts who received extra compensation for this service (one-half of which under the provisions of the New Jersey Industrial Education Law was returned to the community by a state grant). The courses were given at 3.30 or 4.15 o'clock in the afternoon and one evening course was arranged at 7.30. The members of the classes limited to 20 except in one lecture course, paid fees covering only the cost of materials used. Ten lessons were given in each of the following: Marketing, with work in cooking;

chemistry of food with practical menus; salads and desserts; theory of marketing and fireless cooking; bread and rolls; and household routine. The classes are to be continued this year and, on the request of the local Housewives League, a class for domestic help is to be started, the employers arranging to give their employees free time off to attend the class. In describing this successful series of courses one will note especially their practical character; their organization in "short units," each relating to a limited subject; the variety offered to meet various needs; the afternoon hour at which they were given as especially favorable for housewives.

School Credit for Home Work.[1] Oklahoma City has recently been added to the many cities and towns whose schools give credit for home work. The credits under their plan are as follows: Cultural and social credits include reading magazines, books, etc., practicing on the piano or organ, glee club work, girls' club work, and Boy Scouts' work. A girl may earn forty credits a month for club work and a boy fifty credits as a Boy Scout.

The labor group may win ten points an hour for not more than three hours in one day. Here the boys are brought into contact with business and professional pursuits.

The credits for deportment in school run as high as 200 in a month, and are awarded by the high school faculty. The credits for deportment at home may reach 100 a month if recommended by the parents.

Under health, credits are given for sleep, amounting to not less than eight hours a day in a well-ventilated room; baths, at least two a week; care of teeth, hands, nails, face, hair and clothing.

Under this plan it is possible for a student to earn 1500 to 1800 credits a month outside the regular credits. For every 500 of these outside credits 5 per cent is added to the branch of study in which the student has the lowest grades.

Household and Social Science.[2] Under the name of "Home Science and Economics" a Department of King's College for Women (University of London) has for the last six years been venturing a new course in education of University standard.

From the generosity of private donors £75,000 has already been received, and £10,000 has been contributed by a City company. Financial recognition has also been given by the Treasury and the London County Council. In the Report of the Royal Commission on University Education in London the value of an educational opportunity of this kind was fully recognized, and it was recommended that as a "Department of Household and Social Science" (a somewhat happier term than Home Science and Economics) this course should have a place in the University. The Departmental Committee having incidentally approved the recommendation, the Senate has undertaken to accept the whole educational and financial responsibility for the department, so soon as a further endowment of £30,000 can be collected and the course thereby ensured financial stability.

A site on Campden Hill having been secured by the University, buildings are already in course of erection. Laboratories have been provided by Lord Anglesey, while Sir Richard Garton has given a hostel for students, which, by permission of the Queen, is to be called Queen Mary's Hostel, and which will be opened by Prin-

[1] For fuller accounts of home credits see JOURNAL OF HOME ECONOMICS, 6, 1914, no. 2, pp. 141–146.

[2] From the *Morning Post*, June 3, 1914.

cess Christian on the 11th inst. Class-rooms, administrative offices, a refectory, and so on, will be built directly money is found.

A course of this kind has infinite possibilities. The household is the unit on which are built up many of those problems so easily classed as social and the consideration of which is occupying all shades of reforming zeal.

The numerous problems of the day that are roughly classed as "Infant and Child Welfare" must eventually form a definite course of study for the student of "Household and Social Science."

The first consideration must be to provide an education liberal, inspiring, and practically useful, and in making the housewife to make the whole woman capable in her immediate surrounding and resourceful as a citizen.

The whole scheme has so far had to be tentative, if only for economic reasons. The sum already subscribed will seem large only to those who know little of the amounts necessary to endow teaching and erect suitable accommodation in London.

The Two-Dish League.[1] The Paris gourmets assert that the influx of Americans and English who demand five or six courses at a meal is changing the character of the restaurants that were famous for one or two special dishes. In the old days the boulevardier went to the Café Anglais, the Tour d' Argent or the Maison Doree for the one dish that was the speciality of each cafe. One excelled in fish, another in roast, a third in fowl.

When M. Joseph Galtier suggested in the Temps that an association be formed of those who would devote themselves to two dishes at a meal, the "Two-Dish League" was born.

The motto of the league is: "Two dishes, two wines, eight friends."

"The two dishes served at our dinners will be chef d'œuvre, wonders of the art of cooking known only to our country and worthy of true disciples of Lucullus and of Brillat Savarin; our two wines will be the right wines in the right place and handled in the proper manner. We hope thereby to bring about the renaissance of this great national art."

Mme. Daniel Leseur, the French writer, says if she had her way every banquet or plain dinner, official or private, would be a two-dish affair. Henri Duvernois, a well-known critic, notes two illustrious authors in support of the two-dish scheme, Montaigne and Theophile Gautier. Maurice Rostand, son of the author of "Cyrano de Bergerac," submits a menu of his own and would like to see the dinner extended to three dishes and a few more friends.

Windows Open by Law. Paddington, England, somewhat more than a year ago obtained the approval of the Local Government Board on the following by-law:

Except as inhereafter provided for, every lodger in a tenement house shall cause every window of every room that has been let to him and is used as a sleeping room to be opened and to be kept fully open for at least one hour in each morning and afternoon. Provided that the lodger shall not be required to cause any such window to be opened or kept open at any time when the state of the weather is such as to render it necessary that the window shall be closed, or when any bed in any such room is occupied by a sick person to whom such opening of the window would prove harmful.

The penalty of a fine is £5.

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[1] From the *Baltimore Sun*, April 10, 1914.

Training Vocational Counsellors. In view of the growing interest in the vocational guidance of boys and girls in the public schools and the consequent need of competent trained advisers for this work, the Women's Educational and Industrial Union is offering this year a course for vocational counsellors. It is a full-time course covering an academic year and will be of a distinctly practical nature. Miss Florence M. Jackson, director of the Union's Appointment Bureau and vocational counsellor for Smith and Wellesley Colleges, will have general supervision of the course, and Dr. Susan M. Kingsbury professor of economics at Simmons College and director of the Department of Research at the Women's Educational and Industrial Union, will be in charge of the investigations. Candidates will be chosen according to their fitness for the work. Tuition scholarships will be awarded to a limited number for the first year, which opened October 1.

The purpose of the course is to provide a knowledge of industry, of methods of industrial investigation and use of statistics which form the proper foundation for vocational guidance; to supply other training valuable for vocational advisers; and to afford a means for the practical application of principles and methods studied.

The curriculum includes general instruction and also instruction in psychology, education, economics, statistical methods, and laws relating to child labor. A study will be made of vocational guidance methods in use in the United States and Europe, and opportunity will be afforded for observation and practice in the various commercial and charitable employment agencies in Boston, as well as in the Union's vocational bureau. This work will be supplemented by lectures and discussions upon the theories of vocational guidance. An important part of the training is the direction in industrial and social investigation and in methods of handling and interpreting data.

The course should be of particular value to teachers and social workers. The vocational activities conducted by the Union, through its department of vocational advice and placement, its normal courses in vocational training, its research library, and social work departments, give a practical background for such training. The Union occupies a foremost place among organizations engaged in vocational work for women. And this new undertaking is in line with its other endeavors to broaden their educational and industrial opportunities.

Massachusetts Federation for Rural Progress. The second annual meeting of the Massachusetts Federation for Rural Progress was held at the Massachusetts Agricultural College, Amherst, Masssachusetts, September 18, 1914. Representatives from all boards of trade and other organizations interested in seeing county agents in every county of the Commonwealth had been invited to be present, aside from every organization affiliated with the Federation.

The general subject for the afternoon was "The Value of the Work of the County Agricultural Agents in Developing the Agriculture of the State." President Kenyon L. Butterfield, also President of the Federation, presided. The first to speak was Mr. Howard Gross, President of the National Soil Fertility League, Chicago, on "The Value of County Agent Work to the Agriculture of the Nation." Following him came Mr. W. A. Lloyd, Agriculturist in Charge of the North Central Section, on "The Value of County Agent Work to the North Central Section." Both these talks were practical and suggestive of the work that had been done in the sections indicated. Following came a report by Mr. J. A. Scheuerle and Mr. C. J. Grant of the work being done in Hampden County, Massachusetts. The Hampden Coun-

ty Improvement League having been organized but one year, the work is being organized as rapidly as possible. Their report showed what might be done in one year's time which was most gratifying to those specially interested in the endeavor.

President Butterfield then gave his address and outlined a rural policy in Massachusetts. He emphasized the point of getting together all the societies interested and getting a conscious aim expressed. There must certainly be in any organized movement a knowledge of conditions existing, and in the second place a program of improvement, and there must be a correlation of effort. It was recommended by the President that a special committee be appointed to study the questions which had been aroused in that afternoon's meeting and to bring back to the Federation for discussion a very full report upon these particular points. Such a committee was appointed, and after a brief report from the Secretary and Treasurer and the Commission Chairman the meeting was adjourned.

International Council of Women. The Quinquennial Council Meeting of the International Council of Women was held at Rome, Italy, May 5–14, 1914.

Growth in membership and geographical extension was indicated in the reports from Councils in nearly every country of the world.

Among the many resolutions adopted by this great body of women, some of the most significant were those urging the enactment of laws to protect deserted wives and children, and the encouragement of measures to procure for emigrants proper employment bureaus, bureaus of information and instruction, and supervision for young girls on emigrant ships.

League for the Protection of the Family. This organization formed nearly thirty years ago under the leadership of the late Rev. Samuel W. Dyke of Auburndale, Mass., has concerned itself largely with the divorce problem, with the development of legislation on this subject and the education of public opinion. It publishes annual reports which would be of interest to Home Economics workers especially those dealing with social and economic matters. The address of the new Corresponding Secretary is Rev. John L. Seawell, 11 Foster Street, Worcester, Mass.

Women's National Agricultural and Horticultural Association. A National association of women interested in horticulture and agriculture was formed by the expressed wish of more than a hundred persons who were present at the Horticultural Conference, May 1913.

One year later they held their annual conference at Ambler, Pa., where the pioneer and extremely practical horticultural school for women was established. There was gathered together a goodly assemblage of women who have made good in a number of lines belonging to the out-door profession. When one sees the list of over 800 women who have made good at floriculture alone, it is proof positive that in agriculture and its kindred branches there is a big field full of attractions for women who love the out-door life. The program was particularly interesting and varied, making strong appeal to all sorts and kinds of men, as well as women, as this list and partial program show:

Mrs. Francis King, Alma, Mich., President, The True Role of the Horticultural Society; Mr. David Fairchild, Bureau of Plant Industry, Washington, D. C., Foreign Food Plants; Mr. George T. Powell, President Agricultural Experts Association, Small Fruit Culture for Women; Miss Martha Van Rensselaer, Director School of Home Economics, Cornell University, Farm Housekeeping; Mr.

W. P. Hartman, Medford, Chief of the Bureau of Markets and Information, Pomona Grange of Suffolk County, New York, The Grangers' Market Bureau; Mr. Walter P. Stokes, President Garden Club of America, The Coöperation of the Women's National Agricultural and Horticultural Association, and the Garden Club of America; Prof. David F. Warner, Professor Poultry Husbandry, State College, Pennsylvania, Broilers for Profit; Miss Elsie McFate, Owner Hillside Hardy Flower Gardens, Hardy Flower Culture; Mr. Bertrand H. Farr, Iris expert, Wyomissing, Pa., Raising Rainbows.

The objects of this Association are to promote interest and success in horticulture and agriculture by the exchange of information among its members; to bring together supply and demand of produce among its labor, and to increase the knowledge and use of existing institutions.

Child Welfare Exhibition. More than a million and a half has been the attendance at ten large Child Welfare Exhibitions held in the United States during the past four years. The attendance at the large number of smaller exhibitions cannot be calculated.

These exhibitions, the first of which was held at New York three years ago last January, have aimed to show: What we are doing for the children, what we are not doing for the children, what we ought to do for the children.

The exhibitions have been very effective in arousing the public conscience, and in securing needed reforms in the way of legislation and community action. They have been equally effective in educating, not only the mothers, but fathers, and brothers, and sisters, concerning the needs of the child.

The results of legislation have been of many kinds—A new bathing beach in Chicago; an infant welfare division in the municipal board of health in the same city; a factory inspection ordinance in Kansas city; housing inspection in Louisville; better regulations concerning child labor and the work of women; improved systems of public recreation; and the establishing of courses for mothers in the public schools in various cities.

Where, as has usually been the case, the Child Welfare Exhibits have been held independently, they have aimed to cover a very wide field, including: Health, housing, schools, recreation, the working child, the dependent and delinquent child, various children's charities, law and the child, and standards of living. The Child Welfare Exhibit held at Dublin, July 15–August 31, under the Women's National Health Association of Ireland directed its attention chiefly to the questions of Child Health and Play, since the other questions above mentioned are being represented by other societies, with whose exhibits we are working in close coöperation.

The exhibit occupied thirteen rooms, forming a continuous corridor. These rooms were decorated in a uniform color scheme, and all charts and photographs were mounted on wall screens of a uniform size, a device which was at once novel and effective.

Electric Household Appliances. In connection with a study of the possibilities of electricity for household purposes, Miss Anna M. East, who is now studying at Teachers' College, Columbia University, has compiled a list of American manufacturers of electric household appliances which should prove interesting to many teachers of Home Economics.

Miss East will be glad to hear from teachers and others who have met problems in the use of electric household appliances.

Teachers of Home Economics visiting in New York City will find electrical appliances on display at the New York Edison Building, Irving Place and Fifteenth Street, and at their other display rooms. Similar exhibits are found in other cities.

National Education Association. Miss Sarah Louise Arnold, who was to preside at the Household Economics section of the National Education Association Meeting in St. Paul on July 9th, was unable to be present, and at her request, Mrs. Alice P. Norton, represented the American Home Economics Association. The meeting was opened with Miss Grace Shepherd, treasurer of the National Education Association presiding, and was later put in charge of Mrs. Norton. Mrs. Norton read a paper on the Renovation of the Home by Home Economics, and was followed by Miss Rausch of the extension department of the University of Washington; Dr. Snedden, commissioner of education for Massachusetts; and Miss Anna East, who gave an interesting account of the work in Porto Rico. A discussion followed, in which a great many took part, including representatives from California, from Kansas, and from many different sections of the country. Miss Louise McDanell, assistant professor in the University of Minnesota, acted as secretary of the meeting, and also gave an account of the courses offered at Minnesota.

The meeting was unusually well attended.

Brief Notes. The Housing of Homeless Girl Workers is being met in Chicago by the seven Eleanor Clubs, which accommodate 60 to 100 girls each. They pay $3 to $5 a week for board and room, are given the free use of sewing machines and pay five cents for the use of the laundry. Evening classes offer instruction in various branches, and recreation is amply provided. The Clubs own a summer camp which offers an outing to 100 girls at a time at a charge of $3.75 to $4.75 a week. These prices pay all running expenses for club and camp, the expert business management being in the hand of an unpaid board.

Mt. Holyoke College has abolished the compulsory housework on the part of the students which for 75 years has distinguished its management. The system which fitted so well to rural New England conditions two generations ago, is felt to be now out of date. The general tuition fee will be raised, but opportunities to earn money in the new coöperative houses in library, laboratory and secretarial work will be greatly increased for those who need it.

The Home Economics Department of the General Federation of Women's Clubs reports through its chairman, Miss Helen Louise Johnson, that a Home Economics Department has been formed in the Alabama Federation. Nevada alone is yet to be brought into the fold.

The College of Agriculture of the University of Wisconsin singles out each year for honorary recognition three or four men who have contributed eminent services to agriculture. This year Arthur Broughton, one of the foremost flock-masters of the Middle West, John M. True, for several years Secretary of the Wisconsin State Board of Agriculture, and J. H. Hale, of Connecticut, the "peach king of America," will be honored for the work they have done in agricultural lines.

When will the good housekeeper receive an honorary degree?

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